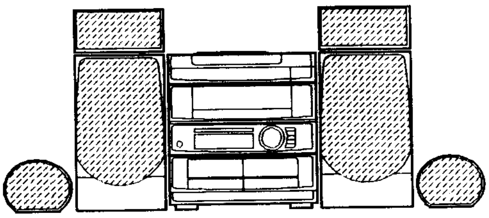
aiwa

aiwa SERVICE

Z-VR750



COMPACT DISC STEREO
CASSETTE RECEIVER

- BASIC TAPE MECHANISM: 2ZM-3MK2 PR5NM
- BASIC CD MECHANISM: 6ZG-1 SDFNM

- TYPE: EZ, K, G

SYSTEM	CD CASSEIVER	SPEAKER	REMOTE CONTROLLER
Z-VR750	CX-ZVR750	SX-ZR750	RC - 7AS02

- If requiring information about the CD mechanism, see Service Manual of 6ZG-1. (S/M Code No.09-975-198-00T)

SERVICE MANUAL

S/M Code No. 09-977-205-3FE

SPECIFICATIONS

<FM Tuner section>	
Tuning range	87.5 MHz to 108 MHz
Usable sensitivity (IHF)	16.8 dBf
Antenna terminals	75 ohms (unbalanced)
<AM Tuner section>	
Tuning range	530 kHz to 1710 kHz (10 kHz step) 531 kHz to 1602 kHz (9 kHz step)
Usable sensitivity	350 µV/m
Antenna	Loop antenna
<LW Tuner section>	
Tuning range	144 kHz to 290 kHz
Usable sensitivity	1440 µV/m
Antenna	Loop antenna
<Amplifier section>	
Power output*	Rated: 80 W + 80 W (6 ohms,T.H.D. 1%, 1 kHz/DIN 45500) Reference: 100 W + 100 W (6 ohms, T.H.D. 10 %, 1 kHz/DIN 45324) DIN MUSIC POWER: 190 W +190 W
	* without connecting the SURROUND SPEAKERS
Total harmonic distortion	0.15 % (10 W, 1 kHz, 6 ohms, DIN AUDIO)
Inputs	VIDEO/AUX: 210 mV (adjustable) PHONO: 340 mV (47 kohms) MIC 1, MIC 2: 1.4mV (20 kohms)
Outputs	CD DIGITAL OUT (OPTICAL) SUPER WOOFER: 2.2 V SPEAKERS: accept speakers of 6 ohms or more SURROUND SPEAKERS: accept speakers of 16 ohms or more PHONES (stereo jack): accepts headphones of 32 ohms or more
<Cassette deck section>	
Track format	4 tracks, 2 channels stereo
Frequency response	CrO2 tape: 50 Hz - 16000 Hz Normal tape: 50 Hz –15000 Hz
Signal-to-noise ratio	60 dB (Dolby B NR ON, CrO2 tape peak level, above 400 Hz)
Recording system	AC bias
Heads	Deck 1: Playback head x 1 Deck 2: Recording/playback/ erase head x 1

<Compact disc player section>	
Laser	Semiconductor laser (λ =780 nm)
D-A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.03% (1 kHz, 0 dB)
Wow and flutter	Unmeasurable
<General>	
Power requirements	230 V AC, 50 Hz
Power consumption	K,G: 160 W EZ: 150 W
Dimensions of main unit (W x H x D)	360 x 394.5 x 380.5 mm
Weight of main unit	11 kg
<Speaker system SX–ZR750>	
Cabinet type	3 way, bass reflex
Speakers	Woofer: EZ,G: 220 mm cone type k: 170 mm cone type Tweeter: 60 mm cone type Super tweeter: 20 mm ceramic type
Impedance	6 ohms
Output sound pressure level	EZ,K: 89 dB/W/m G: 90 dB/W/m
Dimensions (W x H x D)	EZ,G: 260 x 444 x 275 mm k: 260 x 444 x 230 mm
Weight	EZ,G: 4.6 kg K: 4.2 kg

- Design and specifications are subject to change without notice.
- Manufactured under license from Dolby Laboratories Licensing Corporation.
  "DOLBY", the double-D symbol DD and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.
- The word "BBE" and the "BBE symbol" are trademarks of BBE Sound, Inc.
  Under license from BBE Sound, Inc.

ACCESSORIES / PACKAGE LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

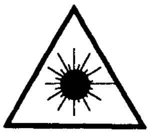
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-MAS-906-010		IB,E(EGFSI)M<EZ>
1	87-MAS-904-010		IB,G(E)M<G>
1	87-MAS-905-010		IB,K(E)M<K>
2	87-MAT-701-010		RC UNIT,7AS02
3	87-006-225-010		AM LOOP ANT NC2
4	87-043-106-010		ANT,FM 1007AWG

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserståling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

ATTENTION

L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL!

Usynlig laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

CLASS 1	LASER PRODUCT
KLASSE 1	LASER PRODUKT
LUOKAN 1	LASER LAITE
KLASS 1	LASER APPARAT

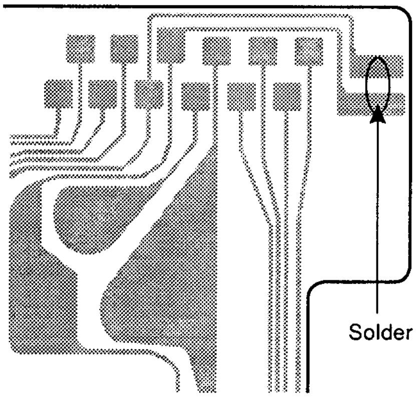
Precaution to replace Optical block

(KSS – 213B)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in figure right.

PICK-UP Assy P.C.B



ELECTRICAL MAIN PARTS LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-A20-455-010		IC,HA12211
	87-A20-355-010		IC,CXA1553P
	87-A20-056-010		IC,BA3880S
	87-A20-456-040		C-IC,BH3810FS
	86-NFZ-655-010		IC,LC72131D(Z)
	87-A20-453-010		C-IC,NJW1102B
	87-A20-438-010		IC,LA1837
	87-A20-440-040		IC,BU1920FS<EZ>
	87-MA3-603-010		C-IC,LC866560W-5E82
	87-070-083-010		IC,GP1U281X
	87-017-915-080		IC,BU4094BCF
	87-A20-613-010		C-IC,BU9262AFS
	87-A20-083-010		IC,BA3835S
	87-A20-450-040		C-IC,BH3864F
	87-017-888-080		IC,NJM4558MD
	87-A20-452-040		C-IC,TC9260FS
TRANSISTOR			
	89-213-702-010		TR,2SB1370E
	87-026-610-080		TR,KTC3198GR
	87-A30-076-080		C-TR,2SC3052F
	87-A30-083-080		TR,CSD1489B
	87-A30-075-080		C-TR,2SA1235F
	87-026-232-080		C-TR,DTA144WK
	87-026-609-080		TR,KTA1266GR
	87-A30-086-070		C-TR,CSD1306E
	87-A30-106-070		C-TR,CMBT5551
	87-A30-111-080		TR,C2N5401
	87-A30-097-010		TR,FN1016
	87-A30-112-080		TR,C2N5551
	87-A30-098-010		TR,FP1016
	87-A30-089-010		FET,2SK2723
	87-A30-072-080		C-TR,RT1P 144C
	87-A30-073-080		C-TR,RT1N 141C
	87-A30-087-080		C-FET,2SK2158
	87-420-612-010		TR,2SD2061E
	87-A30-074-080		C-TR,RT1P 141C
	89-327-143-080		C-TR,2SC2714(O)
	89-505-434-540		C-TR,2SK543-(4/5)
	87-026-263-080		C-TR,RN1410
	89-112-965-080		TR,2SA1296 (0.75W)
	87-A30-085-070		C-TR,CSA1362GR
	87-A30-084-080		TR,CSB1058B
	87-A30-071-080		C-TR,RT1N 144C
	87-026-266-080		C-TR,RN2404
DIODE			
	87-A40-115-060		DIODE,RS603M
	87-017-437-080		DIODE,1N4148M
	87-A40-269-080		C-DIODE,MC2836
	87-A40-270-080		C-DIODE,MC2838
	87-070-274-080		DIODE,1N4003 SEM
	87-A40-186-080		ZENER,UZ5.1BSC
	87-A40-341-080		ZENER,MTZJ36A
	87-017-933-080		ZENER,MTZJ10D
	87-A40-004-080		ZENER,MTZ16A
	87-A40-370-090		DIODE,RK46-P20
	87-070-136-080		ZENER,MTZJ5.1B
	87-A40-116-060		DIODE,RS403L-B-D-51
	87-070-345-080		DIODE,1N4148
	87-A40-003-080		ZENER,MTZJ4.3A
	87-A40-234-080		ZENER,MTZJ5.6A
	87-A40-246-080		DIODE,IN4148 T-72
	87-A40-205-080		ZENER,UZ6.2BSC
	87-017-481-080		ZENER,UZ-5.6BSB
MAIN C.B			
C101	87-016-520-090		CAP,E 3300-65 M SMG
C102	87-016-520-090		CAP,E 3300-65 M SMG
C103	87-A10-056-090		CAP,E 4700-35 M
C104	87-A10-056-090		CAP,E 4700-35 M
C105	87-012-368-080		C-CAP,S 0.1-50 ZF
C106	87-012-368-080		C-CAP,S 0.1-50 ZF
C107	87-012-368-080		C-CAP,S 0.1-50 ZF
C108	87-012-368-080		C-CAP,S 0.1-50 ZF
C109	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C110	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C111	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C112	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C113	87-010-247-080		CAP,E 100-50 M SME
C116	87-010-247-080		CAP,E 100-50 M SME
C117	87-010-430-080		CAP,E 100-63
C118	87-010-263-080		CAP,E 100-10 SME
C119	87-010-260-080		CAP,E 47-25 SME
C120	87-010-403-080		CAP,E 3.3-50 M SME
C121	87-012-140-080		C-CAP,S 470P-50 J CH
C123	87-010-247-080		CAP,E 100-50 M SME
C124	87-010-112-080		CAP,E 100-16 M SME
C125	87-010-235-080		CAP,E 470-16 SME
C126	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C127	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C129	87-010-393-080		CAP,E 100-35 M SME
C200	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C201	87-010-401-080		CAP,E 1-50 M SME
C202	87-010-401-080		CAP,E 1-50 M SME
C205	87-010-182-080		C-CAP,S 2200P-50 KB
C206	87-010-182-080		C-CAP,S 2200P-50 KB
C207	87-010-404-080		CAP,E 4.7-50 M SME
C208	87-010-404-080		CAP,E 4.7-50 M SME
C209	87-010-404-080		CAP,E 4.7-50 M SME
C210	87-010-404-080		CAP,E 4.7-50 M SME
C211	87-010-186-080		C-CAP,S 4700P-50 KB
C212	87-010-186-080		C-CAP,S 4700P-50 KB
C213	87-010-260-080		CAP,E 47-25 SME
C214	87-010-260-080		CAP,E 47-25 SME
C215	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C219	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C220	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C221	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C222	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C225	87-A10-516-080		C-CAP,S 100P-200 J CH
C226	87-A10-516-080		C-CAP,S 100P-200 J CH
C227	87-010-197-080		C-CAP,S 0.01-25 KB
C228	87-010-178-080		C-CAP,S 1000P-50 K B
C231	87-010-176-080		C-CAP,S 680P-50 J SL
C232	87-010-176-080		C-CAP,S 680P-50 J SL
C235	87-010-191-080		C-CAP,S 0.015-50 Z F GRM
C236	87-010-191-080		C-CAP,S 0.015-50 Z F GRM
C237	87-010-197-080		C-CAP,S 0.01-25 KB
C238	87-010-197-080		C-CAP,S 0.01-25 KB
C239	87-010-318-080		C-CAP,S 47P-50 J CH
C240	87-010-318-080		C-CAP,S 47P-50 J CH
C242	87-010-406-080		CAP,E 22-50 M SME
C244	87-010-406-080		CAP,E 22-50 M SME
C301	87-010-318-080		C-CAP,S 47P-50 J CH
C302	87-010-318-080		C-CAP,S 47P-50 J CH
C303	87-012-157-080		C-CAP,S 330P-50 J CH GRM
C304	87-012-157-080		C-CAP,S 330P-50 J CH GRM
C305	87-012-145-080		C-CAP,S 270P-50 J CH
C306	87-012-145-080		C-CAP,S 270P-50 J CH
C307	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C311	87-010-198-080		C-CAP,S 0.022-25 KB

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C312	87-010-198-080		C-CAP,S 0.022-25 KB
C313	87-010-182-080		C-CAP,S 2200P-50 KB
C314	87-010-182-080		C-CAP,S 2200P-50 KB
C315	87-010-181-080		C-CAP,S 1800P-50 KB
C316	87-010-181-080		C-CAP,S 1800P-50 KB
C317	87-012-142-080		C-CAP,S 0.33-16 ZF
C318	87-012-142-080		C-CAP,S 0.33-16 ZF
C319	87-012-141-080		C-CAP,S 0.22-16 ZF
C320	87-012-141-080		C-CAP,S 0.22-16 ZF
C321	87-012-141-080		C-CAP,S 0.22-16 ZF
C322	87-012-141-080		C-CAP,S 0.22-16 ZF
C324	87-010-260-080		CAP,E 47-25 SME
C325	87-010-370-080		CAP,E 330-6.3 M SME
C327	87-010-404-080		CAP,E 4.7-50 M SME
C328	87-010-404-080		CAP,E 4.7-50 M SME
C332	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C335	87-010-401-080		CAP,E 1-50 M SME
C336	87-010-401-080		CAP,E 1-50 M SME
C337	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C339	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C340	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C351	87-012-140-080		C-CAP,S 470P-50 J CH
C352	87-012-140-080		C-CAP,S 470P-50 J CH
C354	87-010-306-080		C-CAP,560P-50 J CH
C355	87-010-178-080		C-CAP,S 1000P-50 KB
C356	87-010-260-080		CAP,E 47-25 SME
C357	87-010-197-080		C-CAP,S 0.01-25 KB
C358	87-010-183-080		C-CAP,S 2700P-50 KB
C359	87-010-183-080		C-CAP,S 2700P-50 KB
C360	87-010-183-080		C-CAP,S 2700P-50 KB
C370	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C371	87-010-179-080		C-CAP,S 1200P-50 KB
C372	87-010-179-080		C-CAP,S 1200P-50 KB
C373	87-010-179-080		C-CAP,S 1200P-50 KB
C374	87-015-826-080		C-CAP,1200P-50 KB
C375	87-010-545-080		CAP,E 0.22-50 M SME
C376	87-010-545-080		CAP,E 0.22-50 M SME
C378	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C381	87-010-197-080		C-CAP,S 0.01-25 KB
C382	87-010-318-080		C-CAP,S 47P-50 J CH
C383	87-010-197-080		C-CAP,S 0.01-25 KB
C384	87-010-402-080		CAP,E 2.2-50 M SME
C385	87-010-184-080		C-CAP,S 3300P-50 KB
C386	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C388	87-010-154-080		C-CAP,S 10P-50 D CH
C401	87-010-187-080		C-CAP,S 5600P-50 KB
C402	87-010-187-080		C-CAP,S 5600P-50 KB
C403	87-010-405-080		CAP,E 10-50 M SME
C404	87-010-405-080		CAP,E 10-50 M SME
C405	87-010-260-080		CAP,E 47-25 SME
C406	87-010-101-080		CAP,E 220-16 SME
C407	87-010-188-080		C-CAP,S 6800P-50 KB
C408	87-010-188-080		C-CAP,S 6800P-50 KB
C409	87-012-140-080		C-CAP,S 470P-50 J CH
C410	87-012-140-080		C-CAP,S 470P-50 J CH
C411	87-010-197-080		C-CAP,S 0.01-25 KB
C412	87-010-197-080		C-CAP,S 0.01-25 KB
C413	87-010-195-080		C-CAP,S 0.068-25 ZF C2012
C414	87-010-195-080		C-CAP,S 0.068-25 ZF C2012
C415	87-010-404-080		CAP,E 4.7-50 M SME
C416	87-010-404-080		CAP,E 4.7-50 M SME
C417	87-010-404-080		CAP,E 4.7-50 M SME
C418	87-010-404-080		CAP,E 4.7-50 M SME
C420	87-010-197-080		C-CAP,S 0.01-25 KB
C421	87-010-401-080		CAP,E 1-50 M SME
C422	87-010-401-080		CAP,E 1-50 M SME
C516	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C601	87-010-322-080		C-CAP,S 100P-50 J CH
C602	87-010-322-080		C-CAP,S 100P-50 J CH
C605	87-010-180-080		C-CAP,S 1500P-50 KB

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C606	87-010-180-080		C-CAP,S 1500P-50 KB
C609	87-010-322-080		C-CAP,S 100P-50 J CH
C610	87-010-322-080		C-CAP,S 100P-50 J CH
C611	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C615	87-010-183-080		C-CAP,S 2700P-50 KB
C619	87-010-263-080		CAP,E 100-10 SME
C620	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C621	87-010-263-080		CAP,E 100-10 SME
C622	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C623	87-010-194-080		C-CAP,S 0.047-25 ZF
C629	87-012-368-080		C-CAP,S 0.1-50 ZF
C630	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C631	87-015-858-080		C-CAP,0.1-25 Z F
C632	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C633	87-010-197-080		C-CAP,S 0.01-25 KB
C636	87-010-322-080		C-CAP,S 100P-50 J CH
C637	87-010-322-080		C-CAP,S 100P-50 J CH
C646	87-010-322-080		C-CAP,S 100P-50 J CH
C647	87-010-322-080		C-CAP,S 100P-50 J CH
C701	87-010-381-080		CAP,E 330-16 SME
C702	87-010-404-080		CAP,E 4.7-50 M SME
C703	87-010-197-080		C-CAP,S 0.01-25 KB
C704	87-010-197-080		C-CAP,S 0.01-25 KB
C711	87-010-263-080		CAP,E 100-10 SME
C712	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C713	87-010-197-080		C-CAP,S 0.01-25 KB
C714	87-010-197-080		C-CAP,S 0.01-25 KB
C715	87-010-322-080		C-CAP,S 100P-50 J CH
C721	87-010-312-080		C-CAP,S 15P-50 J CH
C722	87-010-312-080		C-CAP,S 15P-50 J CH
C723	87-010-178-080		C-CAP,S 1000P-50 KB
C725	87-010-178-080		C-CAP,S 1000P-50 KB
C727	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C728	87-010-248-080		CAP,E 220-10 SME
C755	87-010-197-080		C-CAP,S 0.01-25 KB
C756	87-010-197-080		C-CAP,S 0.01-25 KB
C757	87-010-318-080		C-CAP,S 47P-50 J CH
C758	87-010-149-080		C-CAP,S 5P-50 CH
C761	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C762	87-010-197-080		C-CAP,S 0.01-25 KB
C763	87-010-194-080		C-CAP,S 0.047-25 ZF
C765	87-010-197-080		C-CAP,S 0.01-25 KB
C766	87-010-197-080		C-CAP,S 0.01-25 KB
C767	87-010-405-080		CAP,E 10-50 M SME
C768	87-010-197-080		C-CAP,S 0.01-25 KB
C769	87-010-408-080		CAP,E 47-50 SME
C770	87-015-821-080		C-CAP, 0.047-50 ZF GR
C771	87-010-407-080		CAP,E 33-50 SME
C772	87-010-194-080		C-CAP,S 0.047-25 ZF
C773	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C774	87-010-263-080		CAP,E 100-10 SME
C775	87-010-404-080		CAP,E 4.7-50 M SME
C776	87-010-197-080		C-CAP,S 0.01-25 KB
C777	87-010-400-080		CAP,E 0.47-50 M SME
C778	87-010-401-080		CAP,E 1-50 M SME
C779	87-010-401-080		CAP,E 1-50 M SME
C780	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C781	87-010-405-080		CAP,E 10-50 M SME
C782	87-010-405-080		CAP,E 10-50 M SME
C783	87-015-819-080		C-CAP,0.01-50 KB
C784	87-010-197-080		C-CAP,S 0.01-25 KB
C785	87-010-400-080		CAP,E 0.47-50 M SME
C786	87-010-400-080		CAP,E 0.47-50 M SME
C787	87-010-184-080		C-CAP,S 3300P-50 KB
C788	87-010-184-080		C-CAP,S 3300P-50 KB
C789	87-010-179-080		C-CAP,S 1200P-50 KB
C790	87-010-179-080		C-CAP,S 1200P-50 KB
C791	87-010-405-080		CAP,E 10-50 M SME
C793	87-010-178-080		C-CAP,S 1000P-50 KB<K,G>
C793	87-012-156-080		C-CAP,S 220P-50 J CH<EZ>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C794	87-010-406-080		CAP,E 22-50 M SME
C795	87-010-596-080		C-CAP,S 0.047-16 KR
C796	87-010-403-080		CAP,E 3.3-50 M SME
C797	87-010-180-080		C-CAP,S 1500P-50 KB
C798	87-010-180-080		C-CAP,S 1500P-50 KB
C799	87-010-194-080		C-CAP,S 0.047-25 ZF
C812	87-010-197-080		C-CAP,S 0.01-25 KB
C813	87-010-197-080		C-CAP,S 0.01-25 KB
C814	87-010-197-080		C-CAP,S 0.01-25 KB
C815	87-010-197-080		C-CAP,S 0.01-25 KB
C816	87-010-197-080		C-CAP,S 0.01-25 KB
C817	87-010-197-080		C-CAP,S 0.01-25 KB
C818	87-010-197-080		C-CAP,S 0.01-25 KB
C819	87-010-197-080		C-CAP,S 0.01-25 KB
C820	87-010-408-080		CAP,E 47-50 SME
C821	87-010-197-080		C-CAP,S 0.01-25 KB
C822	87-010-197-080		C-CAP,S 0.01-25 KB
C823	87-010-197-080		C-CAP,S 0.01-25 KB
C828	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C829	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C857	87-010-197-080		C-CAP,S 0.01-25 K B<EZ>
C861	87-012-156-080		C-CAP,S 220P-50 J CH GRM<EZ>
C862	87-012-156-080		C-CAP,S 220P-50 J CH GRM<EZ>
C863	87-012-140-080		C-CAP,S 470P-50 J CH<EZ>
C864	87-010-405-080		CAP,E 10-50 M SME<EZ>
C865	87-010-196-080		C-CAP,S 0.1-25 Z FC 2012<EZ>
C866	87-010-405-080		CAP,E 10-50 M SME<EZ>
C867	87-010-197-080		C-CAP,S 0.01-25 K B<EZ>
C868	87-010-316-080		C-CAP,S 33P-50 J CH<EZ>
C869	87-010-314-080		C-CAP,S 22P-50 J CH<EZ>
C940	87-010-197-080		C-CAP,S 0.01-25 KB
C942	87-010-151-080		C-CAP,S 7P-50 D CH
C947	87-010-197-080		C-CAP,S 0.01-25 KB
C952	87-010-197-080		C-CAP,S 0.01-25 KB
C957	87-010-311-080		C-CAP,S 12P-50 J CH
C958	87-010-197-080		C-CAP,S 0.01-25 KB
C959	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C960	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C962	87-010-408-080		CAP,E 1-50 M SME
CF801	87-008-423-010		FLTR,IF SFE10.7MS3G-A
CF802	87-785-747-010		CF,MS2 GHY R
FB301	87-008-372-080		FLTR,EMIB201 RN1
FFE801	A8-6ZA-191-030		6ZA-1 FEENM
J252	87-A60-031-010		JACK,6. BLK ST W/S W/SW KM
J253	87-099-801-010		JACK,PIN 1P BLK W/O SW
J254	87-A60-238-010		TERMINAL,SP 4P(MSC)
J601	87-099-625-010		JACK,PIN 4P BLK W/O SW
J801	87-033-230-010		TERMINAL,ANT 2P AJ-2016
L201	87-003-383-010		COIL,1UH K
L202	87-003-383-010		COIL,1UH K
L301	87-A50-049-010		COIL,TRAP 85K(COI)
L302	87-A50-049-010		COIL,TRAP 85K(COI)
L351	87-007-342-010		COIL,OSC 85KHZ BIAS
L601	87-003-231-080		C-COIL,S 1UH
L770	87-005-847-080		COIL,2.2UH K CECS
L771	87-A50-165-010		COIL,FM DET-N(TOK)
L772	87-A90-245-010		FLTR,CFAZH-450(TOK)
L791	87-A50-027-010		COIL,1 POLE MPX(TOK)
L792	87-A50-027-010		COIL,1 POLE MPX(TOK)
L832	87-005-847-080		COIL,2.2UH K CECS
L850	87-005-847-080		COIL,2.2UH K CECS<EZ>
L941	87-A50-020-010		COIL,ANT LW(CO1)252kHZ
L942	87-A50-019-010		COIL,OSC LW(CO1)8.56KHZ
L981	87-NF4-668-010		COIL,AM PACK 2(TOM)
⚠ PR201	87-026-682-080		PROTECTOR,10A 491SERIES 60V
⚠ PR202	87-026-682-080		PROTECTOR,10A 491SERIES 60V
R229	87-022-184-080		RES,M/F 0.33-1W J
R230	87-022-184-080		RES,M/F 0.33-1W J
R231	87-022-184-080		RES,M/F 0.33-1W J
R232	87-022-184-080		RES,M/F 0.33-1W J
R644	83-XM1-617-080		C-COIL,BK2125HM601
RY101	87-045-389-010		RELAY,12V OSA-SS-212DM5
SFR301	87-024-435-080		SFR,33K H RH063MC
SFR302	87-024-435-080		SFR,33K H RH063MC
SFR303	87-024-435-080		SFR,33K H RH063MC
SFR304	87-024-435-080		SFR,33K H RH063MC
SFR305	87-024-436-080		SFR,47K H RH063MC
SFR306	87-024-436-080		SFR,47K H RH063MC
SFR351	87-024-436-080		SFR,47K H RH063MC
SFR352	87-024-436-080		SFR,47K H RH063MC
TC942	87-011-221-080		TRIMMER,CER 30P 6.19X5.9 VCT51
TH201	87-A90-221-080		C-THMS,100K
TH202	87-A90-221-080		C-THMS,100K
W1	85-NF5-628-010		F-CABLE 7P-2.5
X721	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309
X850	87-A70-091-010		XTAL,4.332MHZ CSA-309<EZ>
FRONT C.B			
C101	87-010-198-080		C-CAP,S 0.022-25 K B
C102	87-010-198-080		C-CAP,S 0.022-25 K B
C103	87-010-197-080		C-CAP,S 0.01-25 K B
C104	87-010-320-080		C-CAP,S 68P-50 J CH
C105	87-010-316-080		C-CAP,S 33P-50 J CH
C106	87-010-178-080		C-CAP,S 1000P-50 K B
C107	87-012-157-080		C-CAP,S 330P-50 J CH GRM
C108	87-010-405-040		CAP,E 10-50 M SME
C109	87-010-401-040		CAP,E 1-50 M SME
C110	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C111	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C112	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C113	87-A10-189-040		CAP,E 220-10 M
C114	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C115	87-010-178-080		C-CAP,S 1000P-50 K B
C116	87-010-494-040		CAP,E 1-50 5L SRE
C117	87-010-263-080		CAP,E 100-10 SME
C118	87-010-194-080		C-CAP,S 0.047-50 K B
C119	87-010-408-080		CAP,E 47-50 SME
C120	87-010-404-080		CAP,E 4.7-50 M SME
C121	87-010-404-080		CAP,E 4.7-50 M SME
C122	87-010-194-080		C-CAP,S 0.047-50 K B
C123	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C124	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C125	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C126	87-010-312-080		C-CAP,S 15P-50 J CH
C127	87-018-209-080		CAP,TC U 0.1-50 Z F UP050
C201	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C381	87-012-158-080		C-CAP,S 390P-50 J CH GRM
C382	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C383	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C384	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C385	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C386	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C387	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C403	87-010-596-080		C-CAP, S 0.047-16 KR
C404	87-010-596-080		C-CAP, S 0.047-16 KR
C405	87-010-401-040		CAP,E 1-50 M SME
C406	87-010-401-040		CAP,E 1-50 M SME
C407	87-010-184-080		C-CAP,S 3300P-50 K B
C408	87-010-184-080		C-CAP,S 3300P-50 K B
C409	87-010-592-080		C-CAP,S 0.022-16 K R GRM
C410	87-010-592-080		C-CAP,S 0.022-16 K R GRM
C411	87-A10-201-080		C-CAP,S 0.33-16 KB
C412	87-A10-201-080		C-CAP,S 0.33-16 KB
C413	87-A10-264-080		C-CAP,S 0.1-16 Z F
C414	87-010-374-040		CAP,E 47-10 SME
C415	87-010-374-040		CAP,E 47-10 SME
C416	87-A10-264-080		C-CAP,S 0.1-16 Z F
C417	87-016-081-080		C-CAP,S 0.1-16 K R

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C418	87-010-405-040		CAP,E 10-50 M SME
C601	87-010-405-040		CAP,E 10-50 M SME
C602	87-010-186-080		C-CAP,S 4700P-50 K B
C603	87-010-498-040		CAP,E 10-16 M 5L SRE
C604	87-010-406-040		CAP,E 22-50 M SME
C606	87-010-322-080		C-CAP,S 100P-50 J CH
C607	87-010-321-080		C-CAP,S 82P-50 J CH
C608	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C609	87-010-491-040		CAP,E 0.22-50 5L SRE
C610	87-010-322-080		C-CAP,S 100P-50 J CH
C611	87-010-177-080		C-CAP,S 820P-50 J SL
C612	87-010-993-080		C-CAP,S 0.056-25 KB
C614	87-A10-189-040		CAP,E 220-10 M
FB601	87-008-372-080		FLTR,EMIBL01 RN1
FL101	87-MA5-614-110		FL,BJ542GK
LED201	87-017-785-080		LED,SEL4214S
LED202	87-017-785-080		LED,SEL4214S
LED203	87-017-785-080		LED,SEL4214S
LED204	87-017-785-080		LED,SEL4214S
LED205	87-017-785-080		LED,SEL4214S
LED206	87-017-731-080		LED,SEL1510CM2
LED207	87-017-731-080		LED,SEL1510CM2
LED208	87-017-731-080		LED,SEL1510CM2
LED209	87-017-731-080		LED,SEL1510CM2
LED210	87-017-731-080		LED,SEL1510CM2
LED211	87-017-731-080		LED,SEL1510CM2
LED212	87-017-731-080		LED,SEL1510CM2
LED213	87-017-731-080		LED,SEL1510CM2
LED214	87-017-731-080		LED,SEL1510CM2
LED215	87-017-731-080		LED,SEL1510CM2
LED216	87-017-731-080		LED,SEL1510CM2
LED217	87-017-731-080		LED,SEL1510CM2
LED218	87-017-731-080		LED,SEL1510CM2
LED219	87-017-731-080		LED,SEL1510CM2
LED220	87-017-731-080		LED,SEL1510CM2
LED221	87-017-731-080		LED,SEL1510CM2
LED222	87-017-731-080		LED,SEL1510CM2
LED223	87-017-731-080		LED,SEL1510CM2
LED224	87-017-731-080		LED,SEL1510CM2
LED225	87-017-785-080		LED,SEL4214S
LED226	87-017-785-080		LED,SEL4214S
LED227	87-017-785-080		LED,SEL4214S
LED233	87-070-270-010		LED,SEL1510CM2-LF34 P-GRN
LED234	87-070-270-010		LED,SEL1510CM2-LF34 P-GRN
LED235	87-070-270-010		LED,SEL1510CM2-LF34 P-GRN
LED236	87-070-270-010		LED,SEL1510CM2-LF34 P-GRN
LED237	87-070-300-010		LED,SEL1250SMLF34 RED
LED238	87-070-300-010		LED,SEL1250SMLF34 RED
LED241	87-017-785-080		LED,SEL4214S
LED242	87-017-785-080		LED,SEL4214S
LED243	87-017-785-080		LED,SEL4214S
LED244	87-017-785-080		LED,SEL4214S
LED245	87-017-785-080		LED,SEL4214S
LED246	87-017-785-080		LED,SEL4214S
LED247	87-017-785-080		LED,SEL4214S
LED248	87-017-785-080		LED,SEL4214S
LED249	87-017-785-080		LED,SEL4214S
LED250	87-017-785-080		LED,SEL4214S
S301	87-A90-164-080		SW,TACT SKQAB(N)
S302	87-A90-164-080		SW,TACT SKQAB(N)
S303	87-A90-164-080		SW,TACT SKQAB(N)
S304	87-A90-164-080		SW,TACT SKQAB(N)
S305	87-A90-164-080		SW,TACT SKQAB(N)
S306	87-A90-164-080		SW,TACT SKQAB(N)
S307	87-A90-164-080		SW,TACT SKQAB(N)
S308	87-A90-164-080		SW,TACT SKQAB(N)
S309	87-A90-164-080		SW,TACT SKQAB(N)
S321	87-A90-164-080		SW,TACT SKQAB(N)
S322	87-A90-164-080		SW,TACT SKQAB(N)
S323	87-A90-164-080		SW,TACT SKQAB(N)
S324	87-A90-164-080		SW,TACT SKQAB(N)
S325	87-A90-164-080		SW,TACT SKQAB(N)
S328	87-A90-164-080		SW,TACT SKQAB(N)
S329	87-A90-164-080		SW,TACT SKQAB(N)
S330	87-A90-164-080		SW,TACT SKQAB(N)
S331	87-A90-164-080		SW,TACT SKQAB(N)
S332	87-A90-164-080		SW,TACT SKQAB(N)
S333	87-A90-164-080		SW,TACT SKQAB(N)
S334	87-A90-164-080		SW,TACT SKQAB(N)
S335	87-A90-164-080		SW,TACT SKQAB(N)
S336	87-A90-164-080		SW,TACT SKQAB(N)
S341	87-A90-164-080		SW,TACT SKQAB(N)
S342	87-A90-164-080		SW,TACT SKQAB(N)
S343	87-A90-164-080		SW,TACT SKQAB(N)
S346	87-A90-164-080		SW,TACT SKQAB(N)<EZ>
S347	87-A90-164-080		SW,TACT SKQAB(N)<EZ>
S348	87-A90-164-080		SW,TACT SKQAB(N)<EZ>
S349	87-A90-164-080		SW,TACT SKQAB(N)
S350	87-A90-164-080		SW,TACT SKQAB(N)
S351	87-A90-164-080		SW,TACT SKQAB(N)
S352	87-A90-164-080		SW,TACT SKQAB(N)
SW101	87-A90-461-010		SW,RTRY EVQVBCFK124B
X201	87-A70-070-080		VIB,CER 5.76MHZ CRHF

CD KEY C.B

S310	87-A90-164-080		SW,TACT SKQNA(N)
S311	87-A90-164-080		SW,TACT SKQNA(N)
S312	87-A90-164-080		SW,TACT SKQNA(N)
S313	87-A90-164-080		SW,TACT SKQNA(N)
S314	87-A90-164-080		SW,TACT SKQNA(N)
S315	87-A90-164-080		SW,TACT SKQNA(N)
S316	87-A90-164-080		SW,TACT SKQNA(N)

MIC C.B

C605	87-018-209-080		CAP, CER 0.1-50V
J601	87-099-659-010		JACK,6.3 JY-6314-01130
J602	87-099-659-010		JACK,6.3 JY-6314-01130

AC1 C.B

⚠ FC1	87-A90-505-080		FUSE CLAMP,TP00351-51
⚠ FC2	87-A90-505-080		FUSE CLAMP,TP00351-51
⚠ T1	87-A60-317-010		TERMINAL, 1P MSC
⚠ T2	87-A60-317-010		TERMINAL, 1P MSC

AC2 C.B

⚠ PR1	87-026-682-080		PROTECTOR,10A 60V491
⚠ PR2	87-026-682-080		PROTECTOR,10A 60V491
⚠ PR3	87-026-680-080		PROTECTOR,5A 491
⚠ PR4	87-026-680-080		PROTECTOR,5A 491
⚠ PR5	87-026-682-080		PROTECTOR,10A 60V491
⚠ PR6	87-026-682-080		PROTECTOR,10A 60V491

HEAD-2 C.B

	85-ZM3-601-110		PWB,FLEX I
CON351	83-NEG-608-010		CONN ASSY,8P-RPB

HEAD-1 C.B

	85-ZM3-601-110		PWB,FLEX I

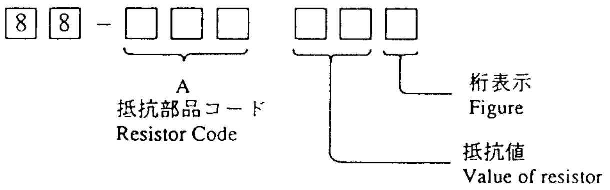
DECK C.B

CON502	87-099-756-010		CONN,15P 9604S F
SFR1	87-024-581-010		SFR,3.3K DIA 6H
SOL1	82-ZM1-626-010		SOL ASSY,27K

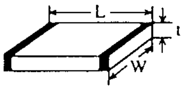
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
SOL2	82-ZM1-626-010		SOL ASSY,27K
SW1	87-036-110-010		SW,MICRO SPPB62
SW2	87-036-110-010		SW,MICRO SPPB62
SW3	87-036-110-010		SW,MICRO SPPB62
SW4	87-036-110-010		SW,MICRO SPPB62
SW5	87-A90-248-010		SW,MICRO ESE11SH2CXQ
SW6	87-A90-248-010		SW,MICRO ESE11SH2CXQ
SW8	87-A90-248-010		SW,MICRO ESE11SH2CXQ
SW9	87-A90-248-010		SW,MICRO ESE11SH2CXQ
W1	82-ZM3-601-010		RBN-CORD,4P-75
PRO C.B			
C101	87-012-368-080		C-CAP,S 0.1-50 Z F
C102	87-012-368-080		C-CAP,S 0.1-50 Z F
C103	87-010-398-090		CAP,E 2200-35 M SME
C104	87-010-398-090		CAP,E 2200-35 M SME
C105	87-010-196-080		C-CAP,S 0.1-25 Z F
C106	87-010-382-080		CAP,E 22-25 M SME
C107	87-012-368-080		C-CAP,S 0.1-50 Z F
C108	87-012-368-080		C-CAP,S 0.1-50 Z F
C109	87-016-369-080		C-CAP,S 0.033-25 B K
C116	87-010-196-080		C-CAP,S 0.1-25 Z F
C117	87-010-196-080		C-CAP,S 0.1-25 Z F
C201	87-010-186-080		C-CAP,S 0.1-25 Z F
C202	87-010-402-080		CAP,E 2.2-50 M SME
C203	87-010-322-080		C-CAP,S 100P-50 J CH
C204	87-010-405-080		CAP,E 10-50 M SME
C205	87-A10-596-080		C-CAP,S 100P-100 J CH
C208	87-010-260-080		CAP,E 47-25 M SME
C209	87-010-993-080		C-CAP,S 0.056-25 K B
C210	87-010-196-080		C-CAP,S 0.1-25 Z F
C211	87-010-197-080		C-CAP,S 0.01-25 K B
C212	87-010-196-080		C-CAP,S 0.1-25 Z F
C213	87-010-406-080		CAP,E 22-50 M SME
C214	87-010-197-080		C-CAP,S 0.01-25 K B
C301	87-010-183-080		C-CAP,S 2700P-50 K B
C302	87-010-402-080		CAP,E 2.2-50 M SME
C303	87-010-322-080		C-CAP,S 100P-50 J CH
C304	87-010-382-080		CAP,E 22-25 M SME
C305	87-A10-516-080		C-CAP,S 100P-200 J CH
C308	87-010-260-080		CAP,E 47-25 M SME
C309	87-010-993-080		C-CAP,S 0.056-25 K B
C310	87-010-196-080		C-CAP,S 0.1-25 Z F
C311	87-010-197-080		C-CAP,S 0.01-25 K B
C312	87-010-196-080		C-CAP,S 0.1-25 Z F
C313	87-010-406-080		CAP,E 22-50 M SME
C314	87-010-197-080		C-CAP,S 0.01-25 K B
C315	87-012-368-080		C-CAP,S 0.1-50 Z F
C316	87-012-368-080		C-CAP,S 0.1-50 Z F
C501	87-010-176-080		C-CAP,S 680P-50 J SL
C502	87-010-176-080		C-CAP,S 680P-50 J SL
C507	87-016-456-080		CAP,E 22-16 LLA
C508	87-010-196-080		C-CAP,S 0.1-25 Z F
C509	87-010-112-080		CAP,E 100-16 M SME
C510	87-010-380-080		CAP,E 47-16 M SME
C512	87-016-472-080		CAP,E 22-16 K SME
C513	87-010-196-080		C-CAP,S 0.1-25 Z F
C514	87-010-263-080		CAP,E 100-10 M SME
C517	87-010-314-080		C-CAP,S 22P-50 J CH
C518	87-010-378-080		CAP,E 10-16 M SME
C519	87-010-378-080		CAP,E 10-16 M SME
C520	87-010-378-080		CAP,E 10-16 M SME
C521	87-010-805-080		C-CAP,S 1-16 Z F
C522	87-010-378-080		CAP,E 10-16 M SME
C523	87-010-400-080		CAP,E 0.47-50 M SME
C524	87-016-081-080		C-CAP,S 0.1-16 K R
C525	87-010-248-080		CAP,E 220-10 M SME
C526	87-012-140-080		C-CAP,S 470P-50 J CH
C527	87-010-186-080		C-CAP,S 4700P-50 K B
C528	87-010-186-080		C-CAP,S 4700P-50 K B
C529	87-010-404-080		CAP,E 4.7-50 M SME
C532	87-A10-229-080		C-CAP,S 0.68-10 K W5R
C533	87-012-393-080		C-CAP,S 0.22-16 K W5R
C534	87-012-393-080		C-CAP,S 0.22-16 K W5R
C535	87-010-404-080		CAP,E 4.7-50 M SME
C536	87-010-404-080		CAP,E 4.7-50 M SME
C537	87-012-393-080		C-CAP,S 0.22-16 R K
C538	87-012-393-080		C-CAP,S 0.22-16 R K
C539	87-016-081-080		C-CAP,S 0.1-16 K R
C542	87-016-081-080		C-CAP,S 0.1-16 K R
C543	87-016-081-080		C-CAP,S 0.1-16 K R
C546	87-016-081-080		C-CAP,S 0.1-16 K R
C547	87-018-134-080		CAP,TC-U 0.01-16 NY UP050
C548	87-010-178-080		C-CAP,S 1000P-50 K B
C549	87-010-178-080		C-CAP,S 1000P-50 K B
C550	87-010-314-080		C-CAP,S 22P-50 J CH
C602	87-010-314-080		C-CAP,S 22P-50 J CH
C604	87-010-319-080		C-CAP,S 56P-50 J CH
C605	87-010-319-080		C-CAP,S 56P-50 J CH
C606	87-016-526-080		C-CAP,S 0.47-16 BK
C607	87-010-197-080		C-CAP,S 0.01-25 K B
C608	87-010-180-080		C-CAP,S 1500P-50 K B
C609	87-010-197-080		C-CAP,S 0.01-25 K B
C610	87-010-197-080		C-CAP,S 0.01-25 K B
C611	87-010-197-080		C-CAP,S 0.01-25 K B
C612	87-010-181-080		C-CAP,S 1800P-50 K B
C613	87-010-196-080		C-CAP,S 0.1-50 Z F
C615	87-010-263-080		CAP,E 100-10 M SME
C616	87-010-404-080		CAP,E 4.7-50 M SME
C617	87-010-196-080		C-CAP,S 0.1-50 Z F
C618	87-010-263-080		CAP,E 100-10 M SME
C621	87-010-403-080		CAP,E 3.3-50 M SME
C622	87-A10-201-080		C-CAP,S 0.33-16 K B
C624	87-010-197-080		C-CAP,S 0.01-25 K B
C701	87-010-401-080		CAP,E 1-50 M SME
C702	87-010-401-080		CAP,E 1-50 M SME
C703	87-010-263-080		CAP,E 100-10 M SME
C706	87-010-314-080		C-CAP,S 22P-50 J CH
C707	87-016-526-080		C-CAP,S 0.47-16 BK
C708	87-016-526-080		C-CAP,S 0.47-16 BK
C709	87-010-380-080		CAP,E 47-16 M SME
C710	87-010-197-080		C-CAP,S 0.01-25 K B
C711	87-018-209-080		CAP,TC-U 0.1-50 ZF
C712	87-010-178-080		C-CAP,S 1000P-50 K B
C713	87-010-178-080		C-CAP,S 1000P-50 K B
C714	87-018-209-080		CAP,TC-U 0.1-50 ZF
FB101	87-008-372-080		FLTR,EMIBL01 RN1
FB512	87-008-372-080		FLTR,EMIBL01 RN1
FB516	87-008-474-080		F-BEAD,BL02RN1-R62T
FB705	87-008-372-080		FLTR,EMIBL01 RN1
J201	87-A60-380-010		JACK,PIN 3P O/W/R YKC21-3
L201	87-003-383-010		COIL,1UH K
L301	87-003-383-010		COIL,1UH K
L601	87-005-212-080		COIL,220UH
R215	87-A00-257-080		RES,M/F 0.15-1W J
R315	87-A00-257-080		RES,M/F 0.15-1W J
R524	87-A00-296-080		C-RES,S 100K-1/8W F

○ チップ抵抗部品コード／CHIP RESISTOR PART CODE

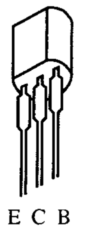
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding


8 8 - □□□ □□□
A
抵抗部品コード
Resistor Code
桁表示
Figure
抵抗値
Value of resistor

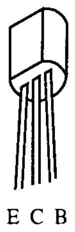
チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm)				抵抗コード :A Resistor Code: A
				外形／Form	L	W	t	
1／16W	1608	±5%	CJ		1.6	0.8	0.45	108
1／10W	2125	±5%	CJ		2	1.25	0.45	118
1／8W	3216	±5%	CJ		3.2	1.6	0.55	128

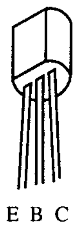
TRANSISTOR ILLUSTRATION



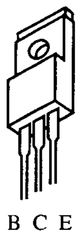
2SA1296
KTA1266
KTC3198



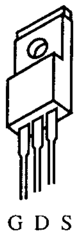
CSD1489
CSB1058



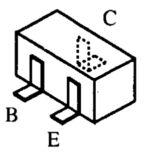
C2N5401
C2N5551



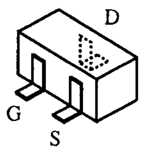
2SB1370
2SD2061
FN1016
FP1016



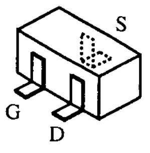
2SK2723



2SA1235	RN1410
2SC2714	RN2404
2SC3052	RT1N141C
CMBT5551	RT1N144C
CSA1362	RT1P141C
CSD1306	RT1P144C
DTA144WK	



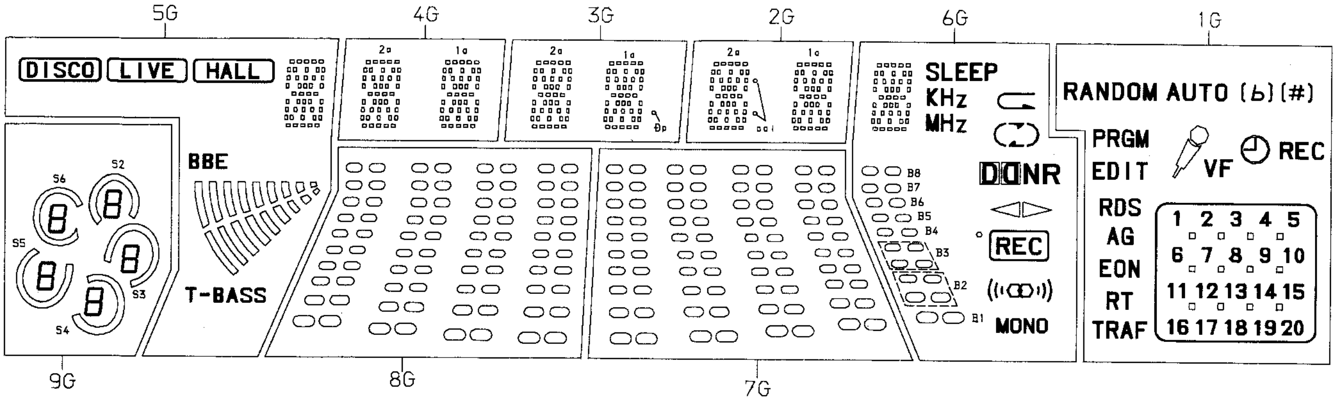
2SK2158

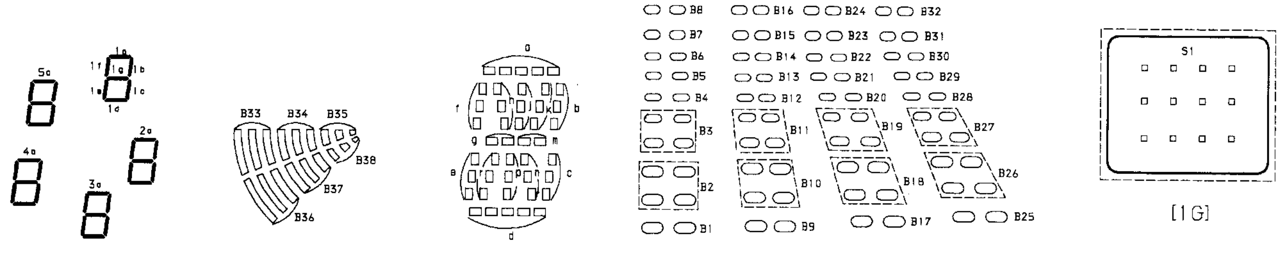


2SK543

FL (BJ542GK) GRID ASSIGNMENT AND ANODE CONNECTION

GRID ASSIGNMENT


5G
4G
3G
2G
6G
1G
DISCO
LIVE
HALL
SLEEP
KHz
MHz
DD NR
REC
MONO
RANDOM AUTO (♭) (#)
PRGM
EDIT
VF
REC
RDS
AG
EON
RT
TRAF
1 2 3 4 5
6 7 8 9 10
11 12 13 14 15
16 17 18 19 20
BBE
T-BASS
S2
S3
S4
S5
S6
B1
B2
B3
B4
B5
B6
B7
B8
9G
8G
7G


5a
1a
1b
1c
1d
1e
1f
1g
2a
3a
4a
B33
B34
B35
B36
B37
B38
a
b
c
d
e
f
g
h
k
m
B1 … B32
S1

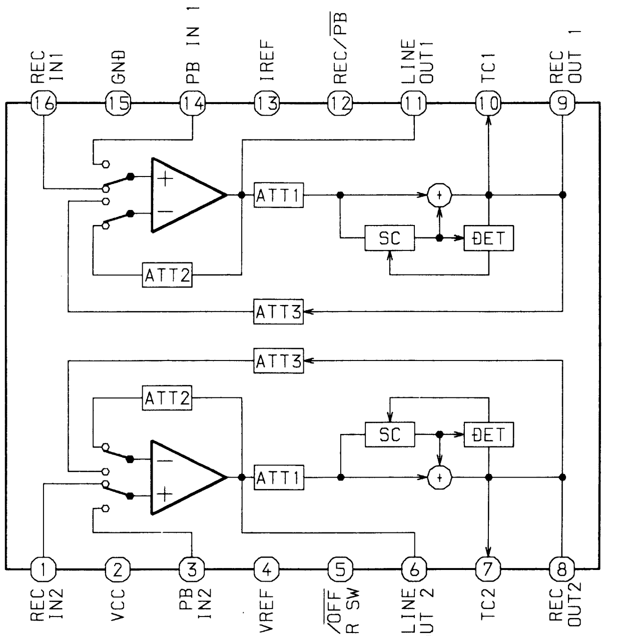
[9G] [5G] [6G ~ 2G] [8G, 7G] [1G]

ANODE CONNECTION

	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	S4	B8	B8	d	d	1d	1d	1d	RANDOM
P2	3e	B16	B16	n	n	1n	1n	1n	PRGM
P3	3c	B24	B24	p	p	1p	1p	1p	EDIT
P4	3g	B32	B32	r	r	1r	1r	1r	S1
P5	3f	B7	B7	e	e	1e	1e	1e	1
P6	3b	B15	B15	c	c	1c	1c	1c	2
P7	3a, 3d	B23	B23	g	g	1g	1g	1g	3
P8	S5	B31	B31	m	m	1m	1m	1m	4
P9	4e	B6	B6	f	f	1f	1f	1f	5
P10	4c	B14	B14	b	b	1b	1b	1b	6
P11	4g	B22	B22	k	k	1k	1k	1k	7
P12	4f	B30	B30	j	j	1j	1j	1j	8
P13	4b	B5	B5	h	h	1h	1h	1h	9
P14	4a, 4d	B13	B13	a	a	1a	1a	1a	10
P15	S2	B21	B21	DD NR	B35	-	Dp	col (down)	11
P16	1a, 1d	B29	B29	▷	B34	-	-	col (up)	12
P17	1b	B4	B4	◁	B33	2d	2d	2d	13
P18	1f	B12	B12	○	BBE	2n	2n	2n	14
P19	1g	B20	B20	REC	B38	2p	2p	2p	15
P20	1c	B28	B28	B8	B37	2r	2r	2r	16
P21	1e	B3	B3	B7	B36	2e	2e	2e	17
P22	S6	B11	B11	B6	T-BASS	2c	2c	2c	18
P23	5a, 5d	B19	B19	B5	(HALL)	2g	2g	2g	19
P24	5b	B27	B27	B4	(LIVE)	2m	2m	2m	20
P25	5f	B2	B2	B3	(DISCO)	2f	2f	2f	RDS
P26	5g	B10	B10	B2	DISCO LIVE HALL	2b	2b	2b	AG
P27	5c	B18	B18	B1	-	2k	2k	2k	EON
P28	5e	B26	B26	((∞))	-	2j	2j	2j	RT
P29	S3	B1	B1	MONO	-	2h	2h	2h	TRAF
P30	2a, 2d	B9	B9	)	-	2a	2a	2a	REC
P31	2b	B17	B17	(	-	-	-	-	◷
P32	2f	B25	B25	MHz	-	-	-	-	🎤VF
P33	2g	-	-	KHz	-	-	-	-	AUTO
P34	2c	-	-	↩	-	-	-	-	((b))
P35	2e	-	-	SLEEP	-	-	-	-	((#))
P36	-	-	-	-	-	-	-	-	♭ #
P37	-	-	-	⇅	-	-	-	-	-

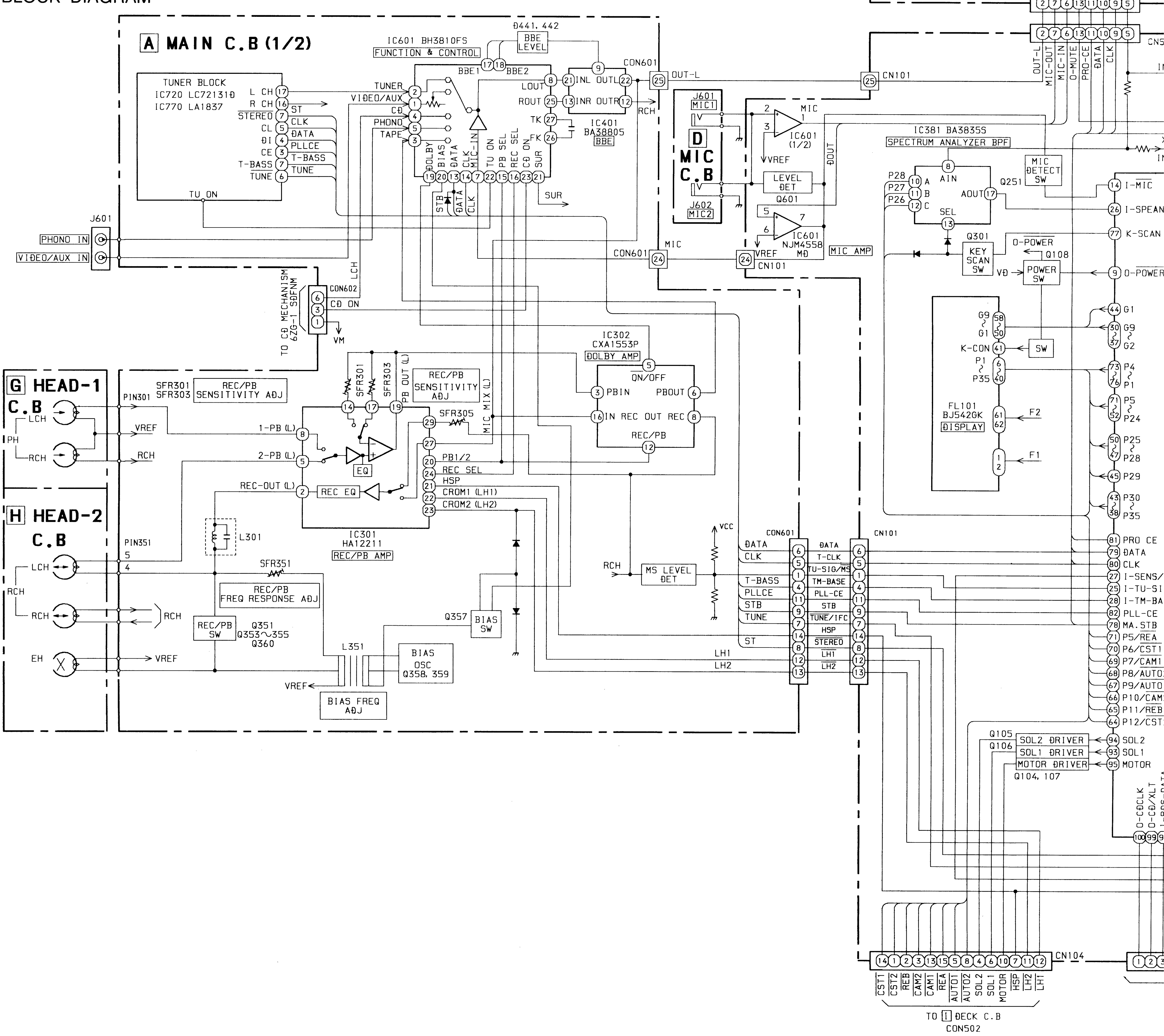
IC BLOCK DIAGRAM – 1

IC, CXA1553P

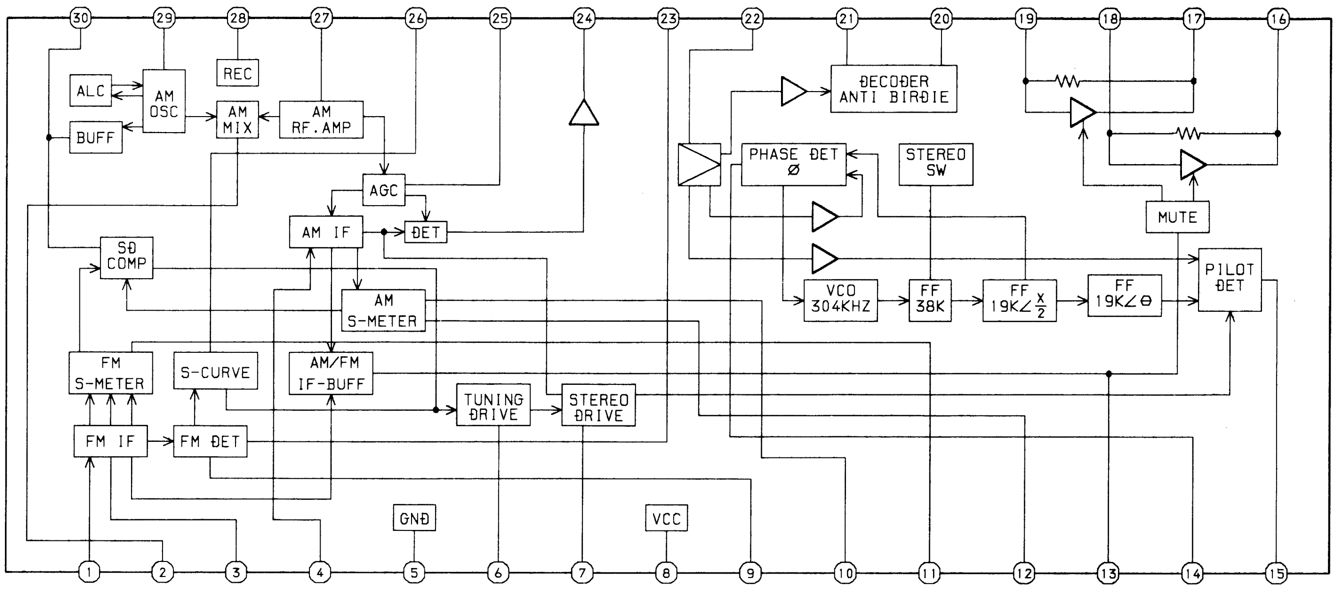

REC IN1
GND
PB IN 1
IREF
REC/PB
LINE OUT1
TC1
REC OUT 1
ATT1
ATT2
ATT3
SC
DET
REC IN2
VCC
PB IN2
VREF
ON/OFF NR SW
LINE OUT 2
TC2
REC OUT2

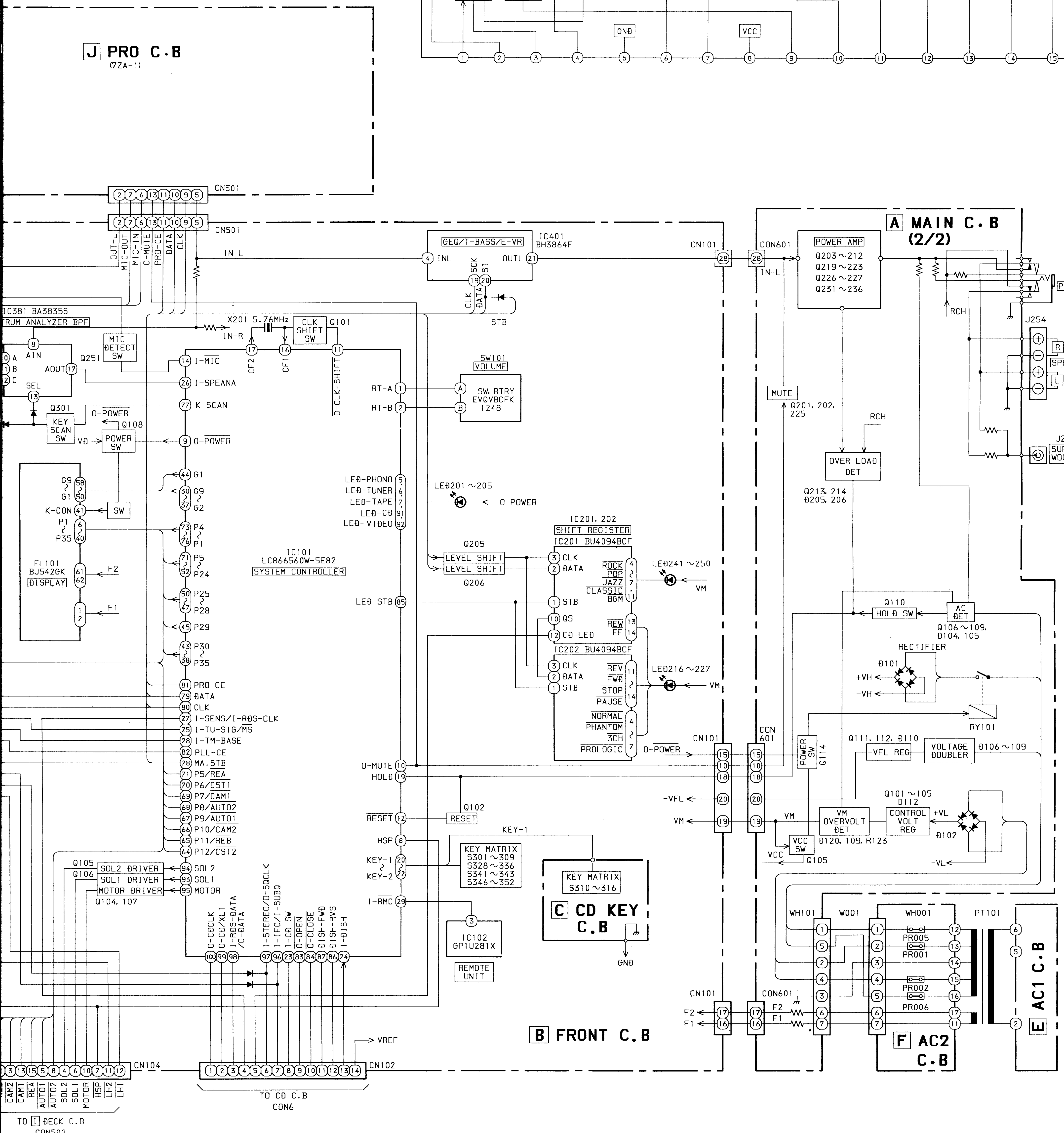
ATT:Attenuator
SC:Side Chain
DET:Detector

BLOCK DIAGRAM

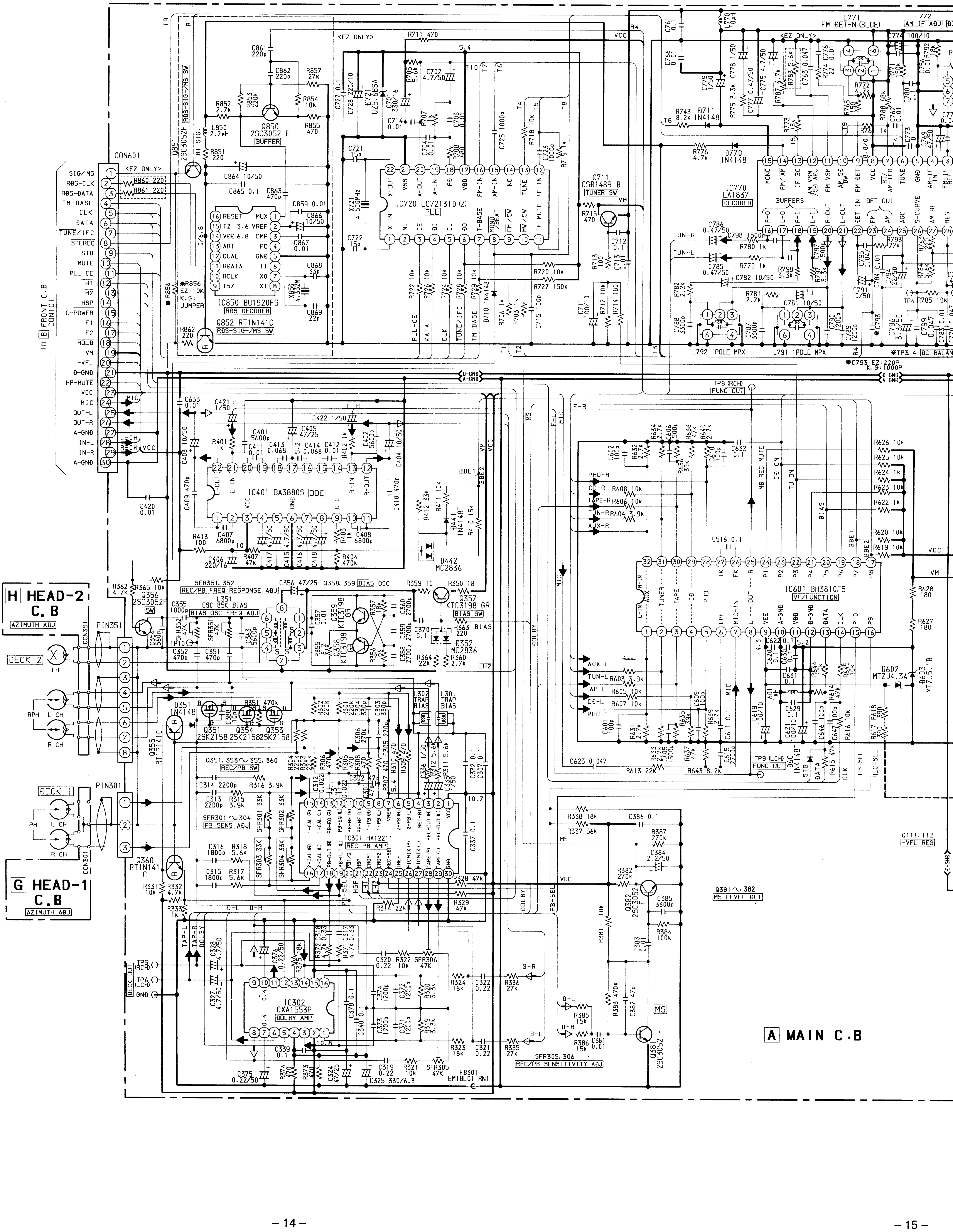

A MAIN C.B (1/2)
IC601 BH3810FS
FUNCTION & CONTROL
D441, 442
BBE LEVEL
CON601
OUT-L
RCH
TUNER BLOCK
IC720 LC72131D
IC770 LA1837
L CH
R CH
STEREO
CL
DI
CE
T-BASS
TUNE
ST
CLK
DATA
PLLCE
TU ON
TUNER
VIDEO/AUX
CD
PHONO
TAPE
BBE1
BBE2
LOUT
ROUT
TK
FK
INL OUTL
INR OUTR
IC401
BA3880S
BBE
DOLBY
BIAS
MIC-IN
PB SEL
REC SEL
CD ON
SUR
STB
J601
PHONO IN
VIDEO/AUX IN
CON602
CD ON
VM
LCH
TO CD MECHANISM 6ZG-1 SDFNM
J601 MIC1
J602 MIC2
D MIC C.B
MIC
IC601 (1/2)
VREF
LEVEL DET
Q601
IC601 NJM4558
MD
MIC AMP
CN101
DOUT
IC381 BA3835S
SPECTRUM ANALYZER BPF
P28 P27 P26
A B C
AIN
AOUT
SEL
Q251
MIC DETECT SW
Q301
KEY SCAN SW
O-POWER
Q108
POWER SW
VD
G9 ~ G1
K-CON
P1 ~ P35
SW
FL101
BJ542GK
DISPLAY
F1
F2
J PRO C.B
(7ZA-1)
CN5
OUT-L
MIC-OUT
MIC-IN
O-MUTE
PRO-CE
DATA
CLK
I-MIC
I-SPEAN
K-SCAN
O-POWER
G1
G9 ~ G2
P4 ~ P1
P5 ~ P24
P25 ~ P28
P29
P30 ~ P35
PRO CE
DATA
CLK
I-SENS/
I-TU-SI
I-TM-BA
PLL-CE
MA.STB
P5/REA
P6/CST1
P7/CAM1
P8/AUTO
P9/AUTO
P10/CAM
P11/REB
P12/CST
Q105
Q106
SOL2 DRIVER
SOL1 DRIVER
MOTOR DRIVER
Q104, 107
SOL2
SOL1
MOTOR
O-CDCLK
O-CD/XLT
IC302
CXA1553P
DOLBY AMP
ON/OFF
PBIN
PBOUT
IN REC OUT REC
REC/PB
G HEAD-1 C.B
LCH
RCH
PH
PIN301
SFR301 SFR303
REC/PB SENSITIVITY ADJ
VREF
1-PB (L)
2-PB (L)
REC-OUT (L)
EQ
REC EQ
PB OUT (L)
MIC MIX (L)
SFR305
PB1/2
REC SEL
HSP
CROM1 (LH1)
CROM2 (LH2)
IC301
HA12211
REC/PB AMP
L301
H HEAD-2 C.B
PIN351
EH
SFR351
REC/PB FREQ RESPONSE ADJ
REC/PB SW
Q351
Q353~355
Q360
L351
BIAS OSC
Q358, 359
Q357
BIAS SW
BIAS FREQ ADJ
VCC
MS LEVEL DET
T-BASS
PLLCE
TUNE
LH1
LH2
T-CLK
TU-SIG/MS
TM-BASE
PLL-CE
TUNE/IFC
STEREO
CN104
CST1
CST2
REB
CAM2
CAM1
REA
AUTO1
AUTO2
SOL2
SOL1
MOTOR
HSP
LH2
LH1
TO I DECK C.B
CON502

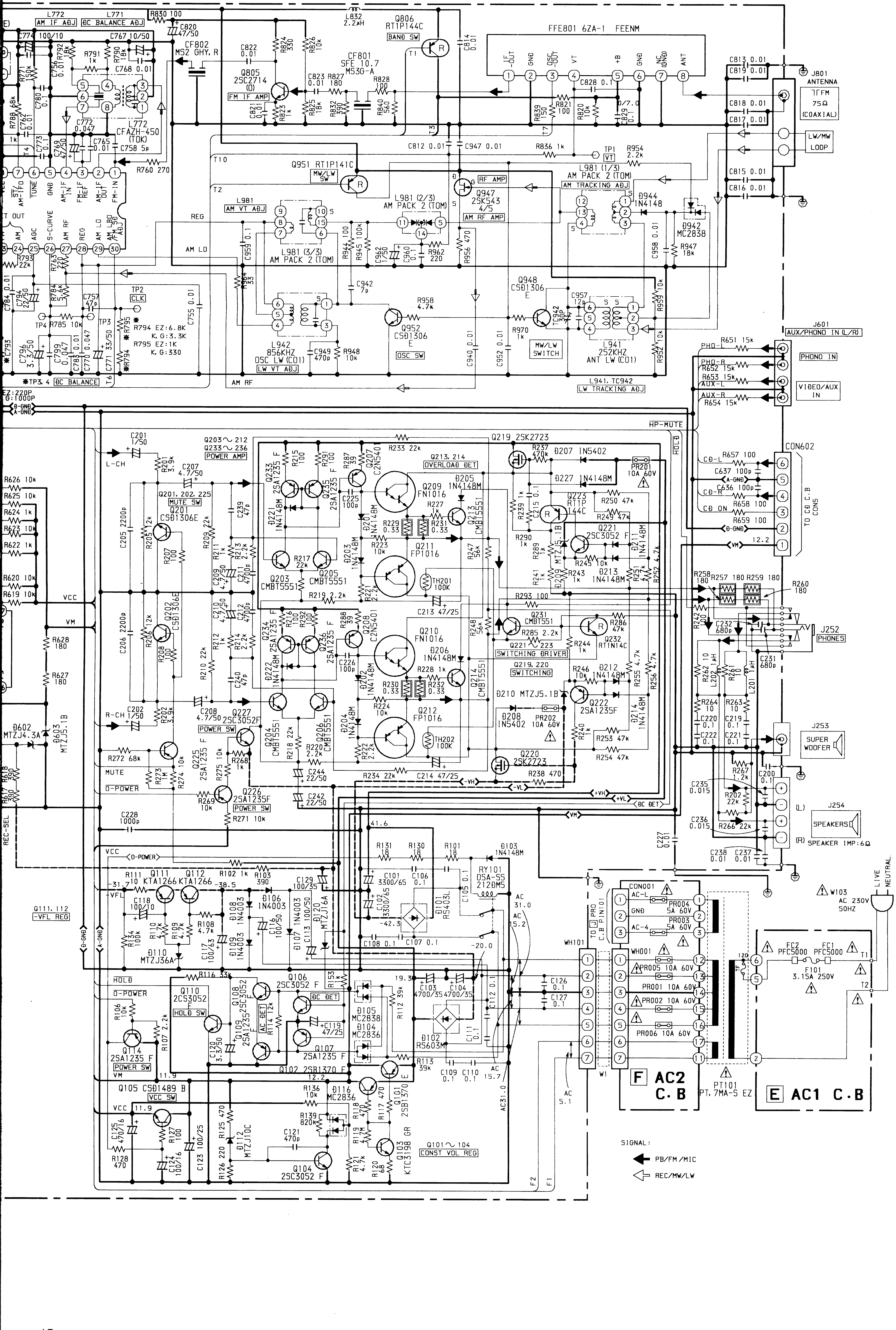
IC, LA1837


ALC
AM OSC
BUFF
REC
AM MIX
AM RF.AMP
AGC
AM IF
DET
SD COMP
AM S-METER
FM S-METER
S-CURVE
AM/FM IF-BUFF
TUNING DRIVE
STEREO DRIVE
FM IF
FM DET
GND
VCC
DECODER ANTI BIRDIE
PHASE DET Ø
STEREO SW
MUTE
PILOT DET
VCO 304KHZ
FF 38K
FF 19K∠x/2
FF 19K∠θ


J PRO C.B
(7ZA-1)
CN501
IC381 BA3835S
SPECTRUM ANALYZER BPF
MIC DETECT SW
Q251
Q301
KEY SCAN SW
O-POWER
Q108
POWER SW
FL101
BJ542GK
DISPLAY
K-CON
SW
IC101
LC866560W-5E82
SYSTEM CONTROLLER
X201 5.76MHz
CLK SHIFT SW
Q101
IC401
BH3864F
GEQ/T-BASS/E-VR
SW101
VOLUME
SW. RTRY
EVQVBCFK
1248
LED201～205
O-POWER
Q205
Q206
LEVEL SHIFT
IC201, 202
SHIFT REGISTER
IC201 BU4094BCF
IC202 BU4094BCF
ROCK
POP
JAZZ
CLASSIC
BGM
REW
FF
REV
FWD
STOP
PAUSE
NORMAL
PHANTOM
3CH
PROLOGIC
LED241～250
LED216～227
VM
Q102
RESET
KEY-1
KEY MATRIX
S301～309
S328～336
S341～343
S346～352
KEY MATRIX
S310～316
C CD KEY C.B
GND
IC102
GP1U281X
REMOTE UNIT
Q105
Q106
SOL2 DRIVER
SOL1 DRIVER
MOTOR DRIVER
Q104, 107
B FRONT C.B
CN101
CN104
CN102
VREF
TO CD C.B
CON6
TO I DECK C.B
CON502
A MAIN C.B
(2/2)
CON601
POWER AMP
Q203～212
Q219～223
Q226～227
Q231～236
MUTE
Q201, 202, 225
RCH
OVER LOAD DET
Q213, 214
D205, 206
J252
PHONES
J254
SPEAKERS
J253
SUPER WOOFER
Q110
HOLD SW
AC DET
Q106～109,
D104, 105
RECTIFIER
D101
+VH
-VH
RY101
POWER SW
Q114
Q111, 112, D110
-VFL REG
VOLTAGE DOUBLER
D106～109
Q101～105
D112
VM OVERVOLT DET
D120, 109, R123
CONTROL VOLT REG
+VL
-VL
D102
VCC SW
Q105
WH101
W001
WH001
PR005
PR001
PR002
PR006
PT101
F AC2 C.B
E AC1 C.B
F2
F1
-VFL

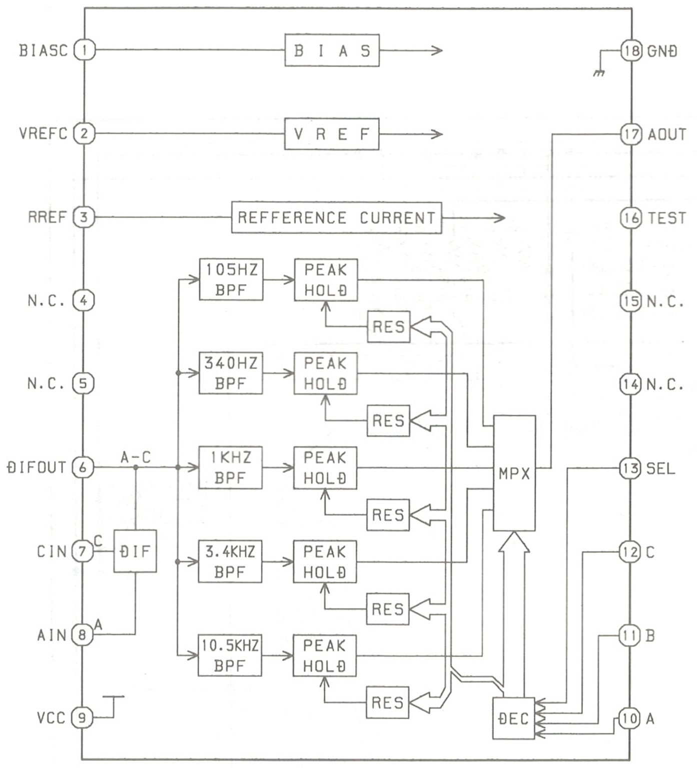
SCHEMATIC DIAGRAM – 1 (MAIN)


TO B FRONT C.B CON101
CON601
<EZ ONLY>
SIG/MS
RDS-CLK
RDS-DATA
TM-BASE
CLK
DATA
TUNE/IFC
STEREO
STB
MUTE
PLL-CE
LH1
LH2
HSP
O-POWER
F1
F2
HOLD
VM
-VFL
D-GND
HP-MUTE
VCC
MIC
OUT-L
OUT-R
A-GND
IN-L
IN-R
A-GND
IC850 BU1920FS
RDS DECODER
Q850 2SC3052 F
BUFFER
Q851 2SC3052F
RDS-SIG-/MS SW
Q852 RT1N141C
RDS-SIG-/MS SW
IC720 LC72131D (Z)
PLL
X721 4.500MHz
Q711 CSD1489 B
TUNER SW
IC770 LA1837
DECODER
L771 FM DET-N (BLUE)
L772 AM IF ADJ
L792 1POLE MPX
L791 1POLE MPX
*C793 EZ:220P K.G:1000P
IC401 BA3880S BBE
D441 1N4148T
D442 MC2836
IC601 BH3810FS
VF/FUNCTION
TP8 (RCH) FUNC OUT
TP9 (LCH) FUNC OUT
D602 MTZJ4.3A
D603 MTZJ5.1B
Q111, 112 -VFL REG
H HEAD-2 C.B
AZIMUTH ADJ
DECK 2
PIN351
CON351
SFR351, 352 REC/PB FREQ RESPONSE ADJ
Q356 2SC3052F SW
L351 OSC 85K BIAS
BIAS OSC FREQ ADJ
Q358, 359 BIAS OSC
Q357 KTC3198 GR BIAS SW
D352 MC2836
Q351, 353～355, 360 REC/PB SW
Q351 2SK2158
Q354 2SK2158
Q353 2SK2158
Q355 RT1P141C
D351 1N4148
L302 TRAP BIAS
L301 TRAP BIAS
DECK 1
PIN301
CON301
SFR301～304 PB SENS ADJ
IC301 HA12211
REC PB AMP
Q360 RT1N141C
G HEAD-1 C.B
AZIMUTH ADJ
DECK OUT
TP5 (RCH)
TP6 (LCH)
GND
IC302 CXA1553P
DOLBY AMP
SFR305, 306 REC/PB SENSITIVITY ADJ
FB301 EMIBL01 RN1
Q381～382 MS LEVEL DET
Q381 2SC3052 F
Q382 2SC3052 F
MS
A MAIN C.B

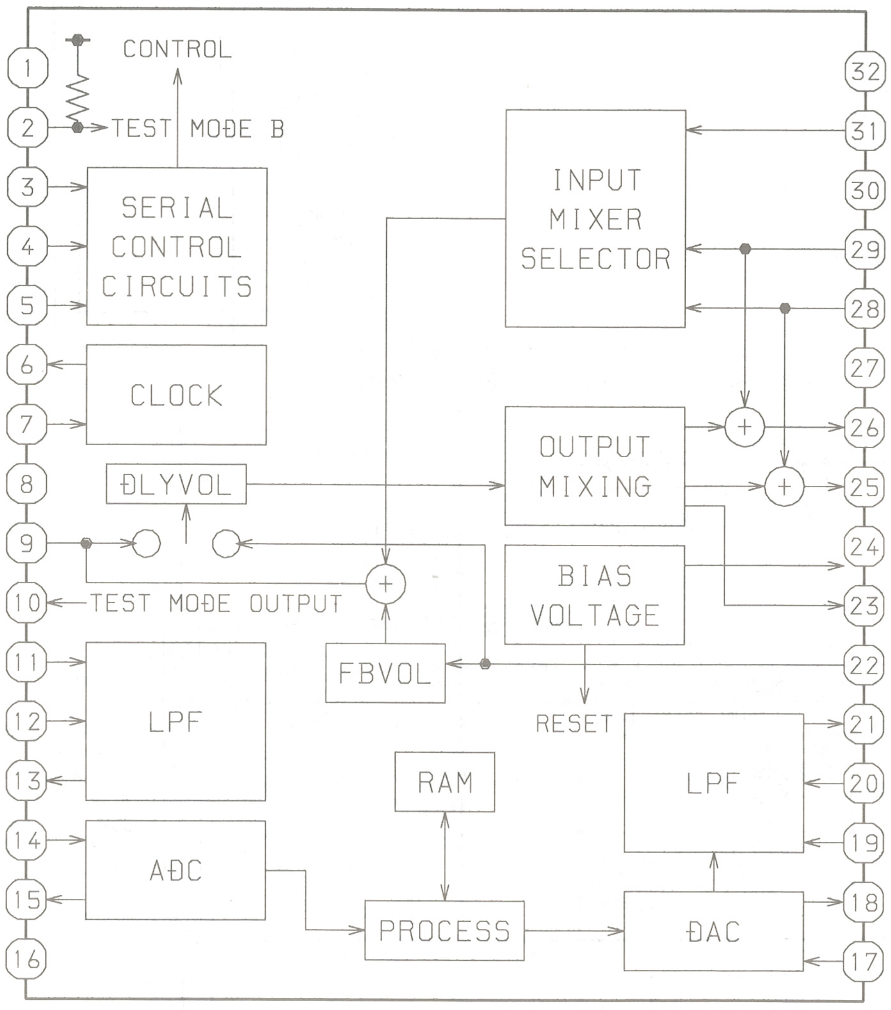

FFE801 6ZA-1 FEENM
IF-OUT
GND
OSC-OUT
VT
+B
GND
NC (GND)
ANT
J801 ANTENNA
FM 75Ω (COAXIAL)
LW/MW LOOP
Q806 RT1P144C
BAND SW
CF801 SFE 10.7 MS3G-A
Q805 2SC2714 (O)
FM IF AMP
CF802 MS2 GHY.R
L772 AM IF ADJ
L771 BC BALANCE ADJ
L772 CFAZH-450 (TOK)
Q951 RT1P141C
MW/LW SW
Q947 2SK543 4/5
RF AMP
AM RF AMP
L981 AM VT ADJ
L981 (2/3) AM PACK 2 (TOM)
L981 (3/3) AM PACK 2 (TOM)
L981 (1/3) AM PACK 2 (TOM)
AM TRACKING ADJ
D944 1N4148
D942 MC2838
Q948 CSD1306 E
MW/LW SWITCH
Q952 CSD1306 E
OSC SW
L942 856KHZ OSC LW (CO1)
LW VT ADJ
L941 252KHZ ANT LW (CO1)
L941, TC942 LW TRACKING ADJ
TP1 VT
TP2 CLK
TP3
TP4
*TP3, 4 BC BALANCE
R794 EZ:6.8K K,G:3.3K
R795 EZ:1K K,G:330
EZ:220P G:1000P
AM LO
AM RF
REG
J601 AUX/PHONO IN (L/R)
PHONO IN
VIDEO/AUX IN
PHO-L
PHO-R
AUX-L
AUX-R
HP-MUTE
CON602
TO CD C.B CON5
CD-L
CD-R
CD ON
D-GND
VM
Q219 2SK2723
Q203~212 Q233~236 POWER AMP
Q213, 214 OVERLOAD DET
Q201, 202, 225 MUTE SW
Q201 CSD1306E
Q202 CSD1306E
Q209 FN1016
Q210 FN1016
Q211 FP1016
Q212 FP1016
TH201 100K
TH202 100K
Q223 RT1P144C
Q221 2SC3052 F
Q231 CMBT5551
Q232 RT1N14C
Q221~223 SWITCHING DRIVER
Q219, 220 SWITCHING
D210 MTZJ5.1B
D208 1N5402
D207 1N5402
PR201 10A 60V
PR202 10A 60V
Q220 2SK2723
Q222 2SA1235F
Q227 2SC3052F
POWER SW
Q225 2SA1235 F
Q226 2SA1235F
POWER SW
L-CH
R-CH
MUTE
O-POWER
VCC
J252 PHONES
J253 SUPER WOOFER
J254 SPEAKERS
SPEAKER IMP: 6Ω
+VH
+VL
-VH
-VL
DC DET
D602 MTZJ4.3A
D603 MTZJ5.1B
REC-SEL
RY101 OSA-SS 212DM5
D101 RS403L
C101 3300/65
C102 3300/65
Q111, 112 -VFL REG
Q111 KTA1266
Q112 KTA1266
D110 MTZJ36A
D106 1N4003
D107 1N4003
D108 1N4003
D109 1N4003
D120 MTZJ16A
HOLD
Q110 2SC3052 F
HOLD SW
Q108 2SC3052
Q109 2SA1235
AC DET
Q106 2SC3052 F
DC DET
Q107 2SA1235 F
D105 MC2838
D104 MC2836
D102 RS603M
Q114 2SA1235 F
POWER SW
Q102 2SB1370 F
Q105 CSD1489 B
VCC SW
D116 MC2836
Q101 2SB1370 E
Q103 KTC3198 GR
Q104 2SC3052 F
Q101~104 CONST VOL REG
D112 MTZJ10C
WH101
TO J PRO C.B PIN101
CON001
AC-L
GND
AC-4
PR004 5A 60V
PR003 5A 60V
WH001
PR005 10A 60V
PR001 10A 60V
PR002 10A 60V
PR006 10A 60V
W1
F AC2 C.B
PT101 PT, 7MA-S EZ
E AC1 C.B
FC2 PFC5000
FC1 PFC5000
F101 3.15A 250V
W103 AC 230V 50HZ
LIVE
NEUTRAL
T1
T2
SIGNAL:
PB/FM/MIC
REC/MW/LW

IC BLOCK DIAGRAM – 2

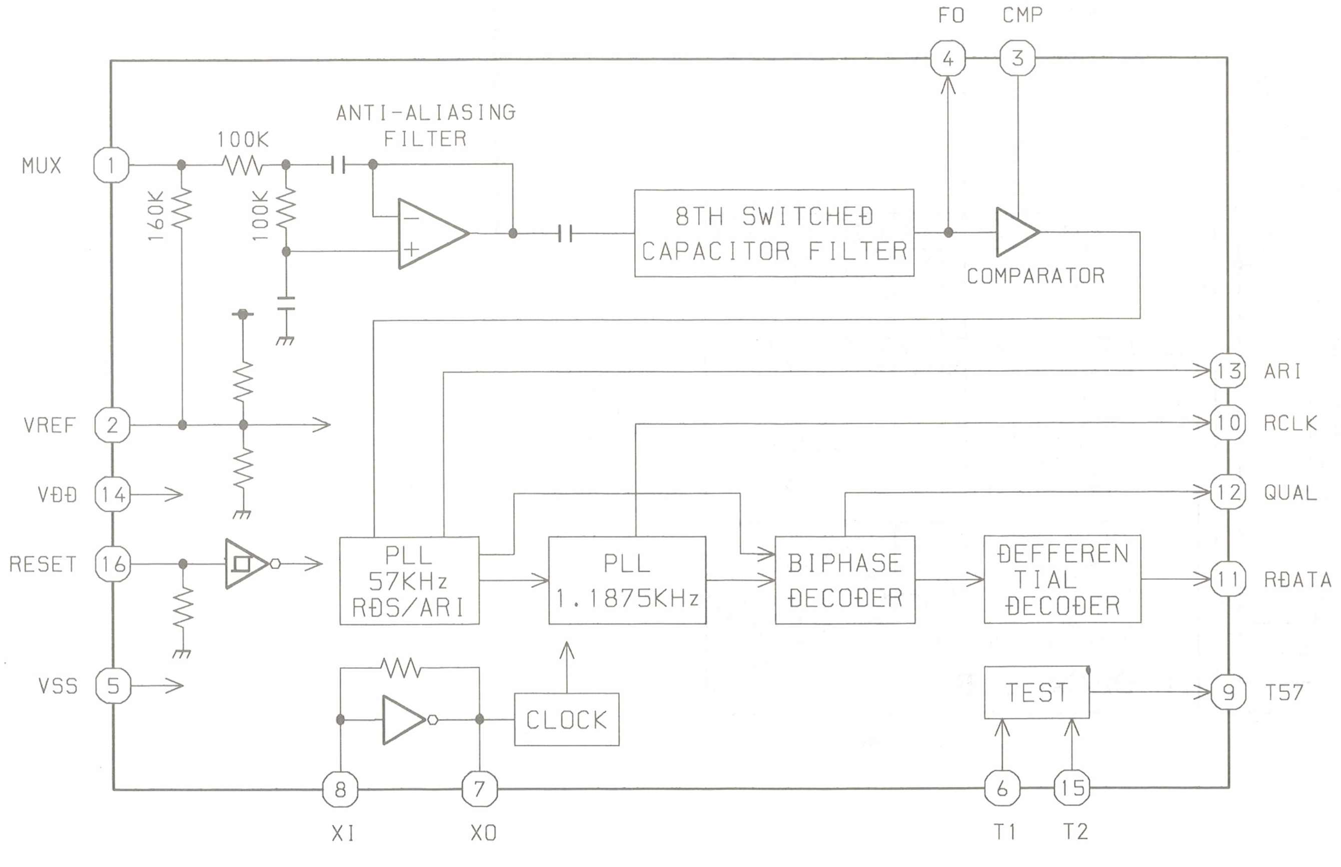
IC, BA3835S


BIASC 1
VREFC 2
RREF 3
N.C. 4
N.C. 5
DIFOUT 6
CIN 7
AIN 8
VCC 9
18 GND
17 AOUT
16 TEST
15 N.C.
14 N.C.
13 SEL
12 C
11 B
10 A
BIAS
VREF
REFFERENCE CURRENT
105HZ BPF
340HZ BPF
1KHZ BPF
3.4KHZ BPF
10.5KHZ BPF
PEAK HOLD
RES
MPX
DEC
DIF
A-C
C
A

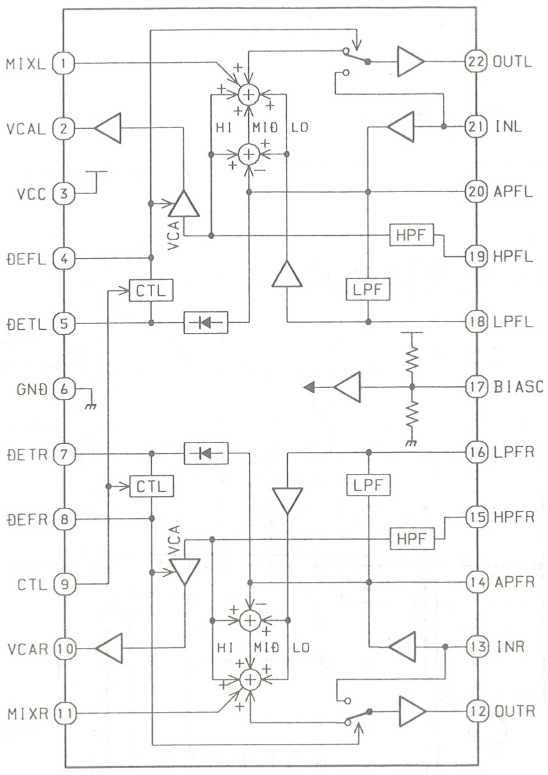
IC, BU9262AFS


CONTROL
TEST MODE B
SERIAL CONTROL CIRCUITS
CLOCK
DLYVOL
TEST MODE OUTPUT
LPF
ADC
INPUT MIXER SELECTOR
OUTPUT MIXING
BIAS VOLTAGE
FBVOL
RESET
RAM
LPF
PROCESS
DAC
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

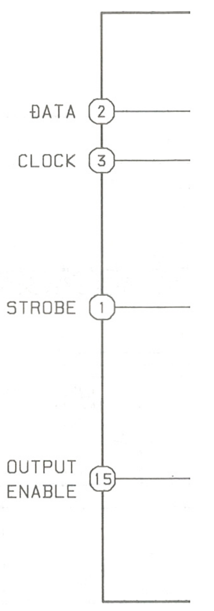
IC, BU1920FS


FO
CMP
4
3
MUX 1
VREF 2
VDD 14
RESET 16
VSS 5
ANTI-ALIASING FILTER
100K
160K
100K
8TH SWITCHED CAPACITOR FILTER
COMPARATOR
13 ARI
10 RCLK
12 QUAL
11 RDATA
9 T57
PLL 57KHz RDS/ARI
PLL 1.1875KHz
BIPHASE DECODER
DEFFERENTIAL DECODER
CLOCK
TEST
8
7
6
15
XI
XO
T1
T2

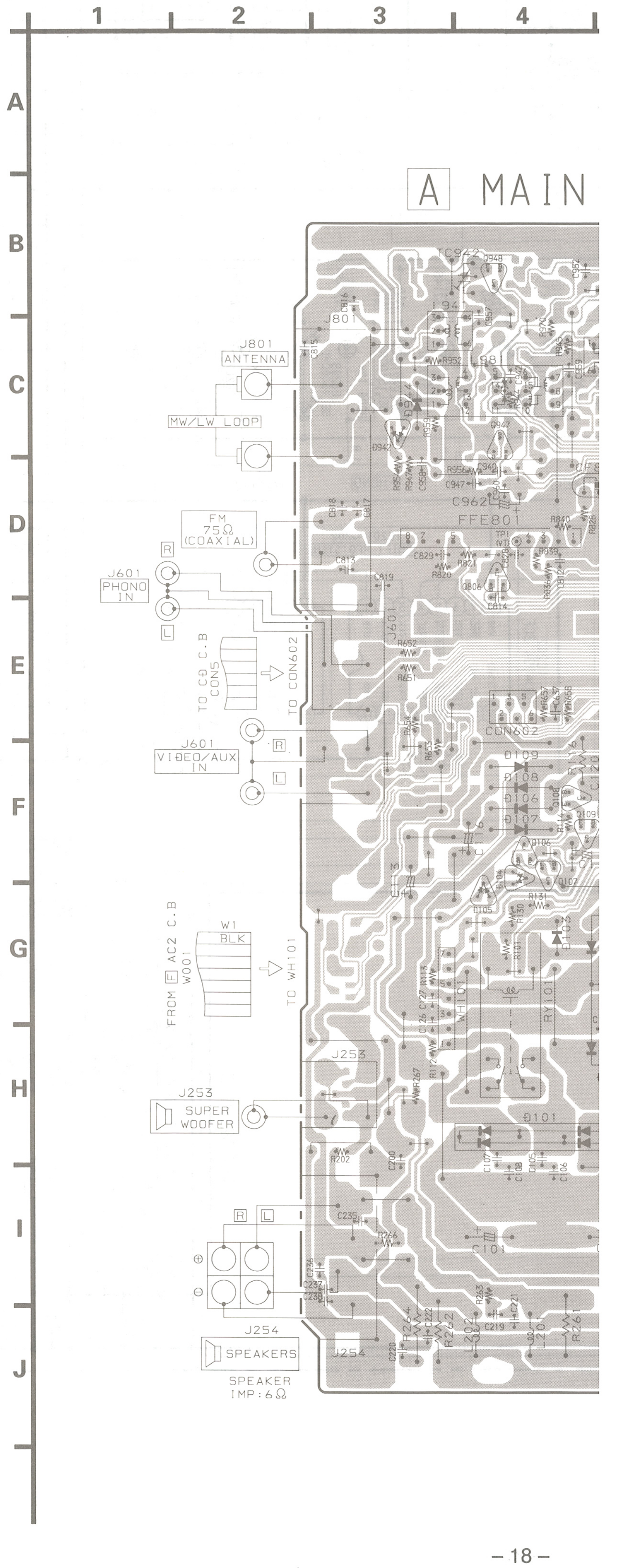
IC, BA3880S


MIXL 1
VCAL 2
VCC 3
DEFL 4
DETL 5
GND 6
DETR 7
DEFR 8
CTL 9
VCAR 10
MIXR 11
22 OUTL
21 INL
20 APFL
19 HPFL
18 LPFL
17 BIASC
16 LPFR
15 HPFR
14 APFR
13 INR
12 OUTR
HI
MID
LO
VCA
CTL
HPF
LPF

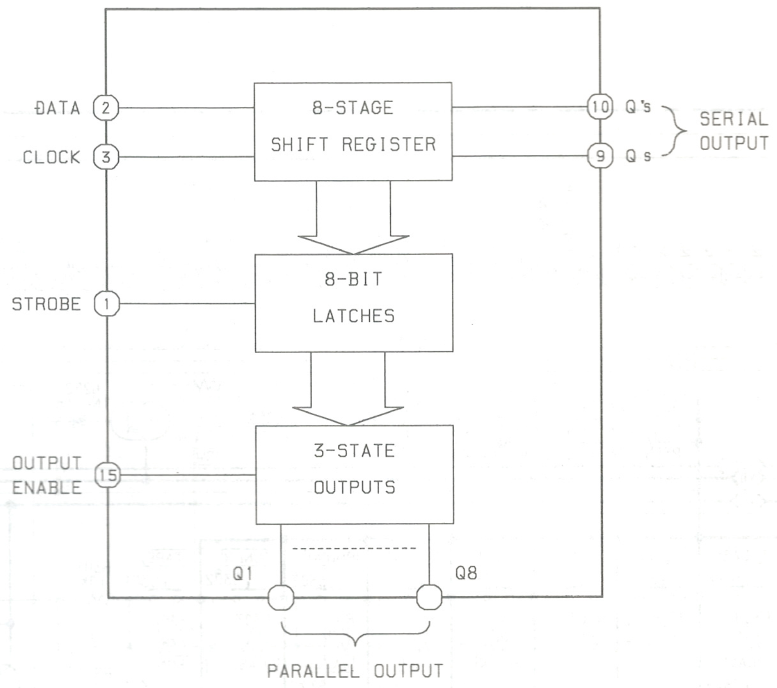
IC, BU409


DATA 2
CLOCK 3
STROBE 1
OUTPUT ENABLE 15

WIRING – 1 (MAIN)


1
2
3
4
A
B
C
D
E
F
G
H
I
J
A MAIN
J801 ANTENNA
MW/LW LOOP
FM 75Ω (COAXIAL)
R
L
J601 PHONO IN
TO CD C.B CON5
TO CON602
J601 VIDEO/AUX IN
FROM F AC2 C.B W001
W1 BLK
TO WH101
J253 SUPER WOOFER
J254 SPEAKERS
SPEAKER IMP: 6Ω
FFE801
CON602
D101
RY101
C101

IC, BU4094BCF


ĐATA 2
CLOCK 3
STROBE 1
OUTPUT ENABLE 15
8-STAGE SHIFT REGISTER
8-BIT LATCHES
3-STATE OUTPUTS
10 Q's
9 Qs
SERIAL OUTPUT
Q1
Q8
PARALLEL OUTPUT

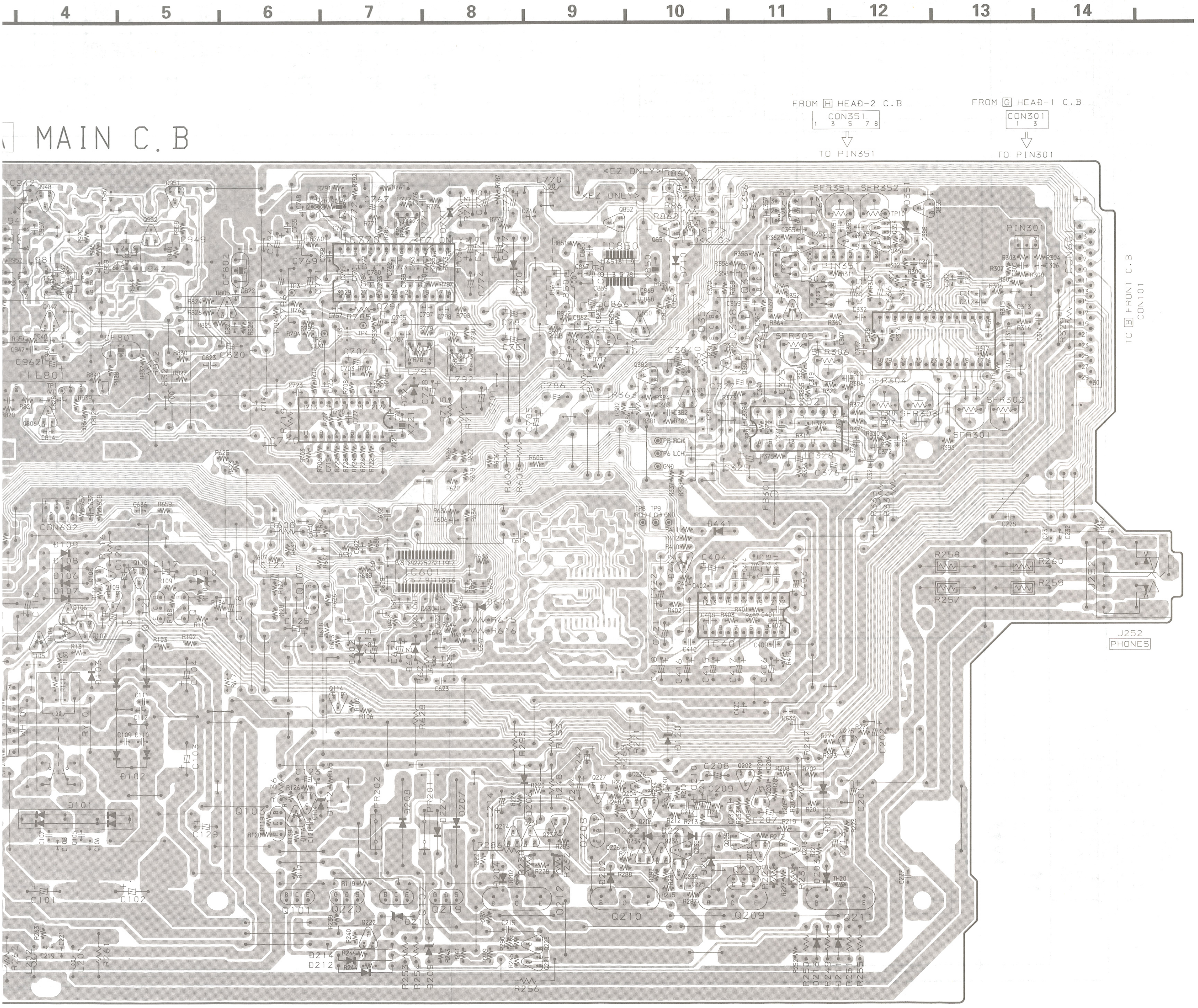
TRUTH TABLE

CLOCK	OUTPUT ENABLE	STROBE	ĐATA	PARALLEL OUTPUTS		SERIAL OUTPUTS	
				Q1	Qn	Qs	Q's
↑	L	X	X	Z	Z	Q7	NO Chg.
↓	L	X	X	Z	Z	No Chg.	Qs
↑	H	L	X	No Chg.	No Chg.	Q7	No Chg.
↑	H	H	L	L	Qn-1	Q7	No Chg.
↑	H	H	H	H	Qn-1	Q7	No Chg.
↓	H	X	X	No Chg.	No Chg.	No Chg.	Qs

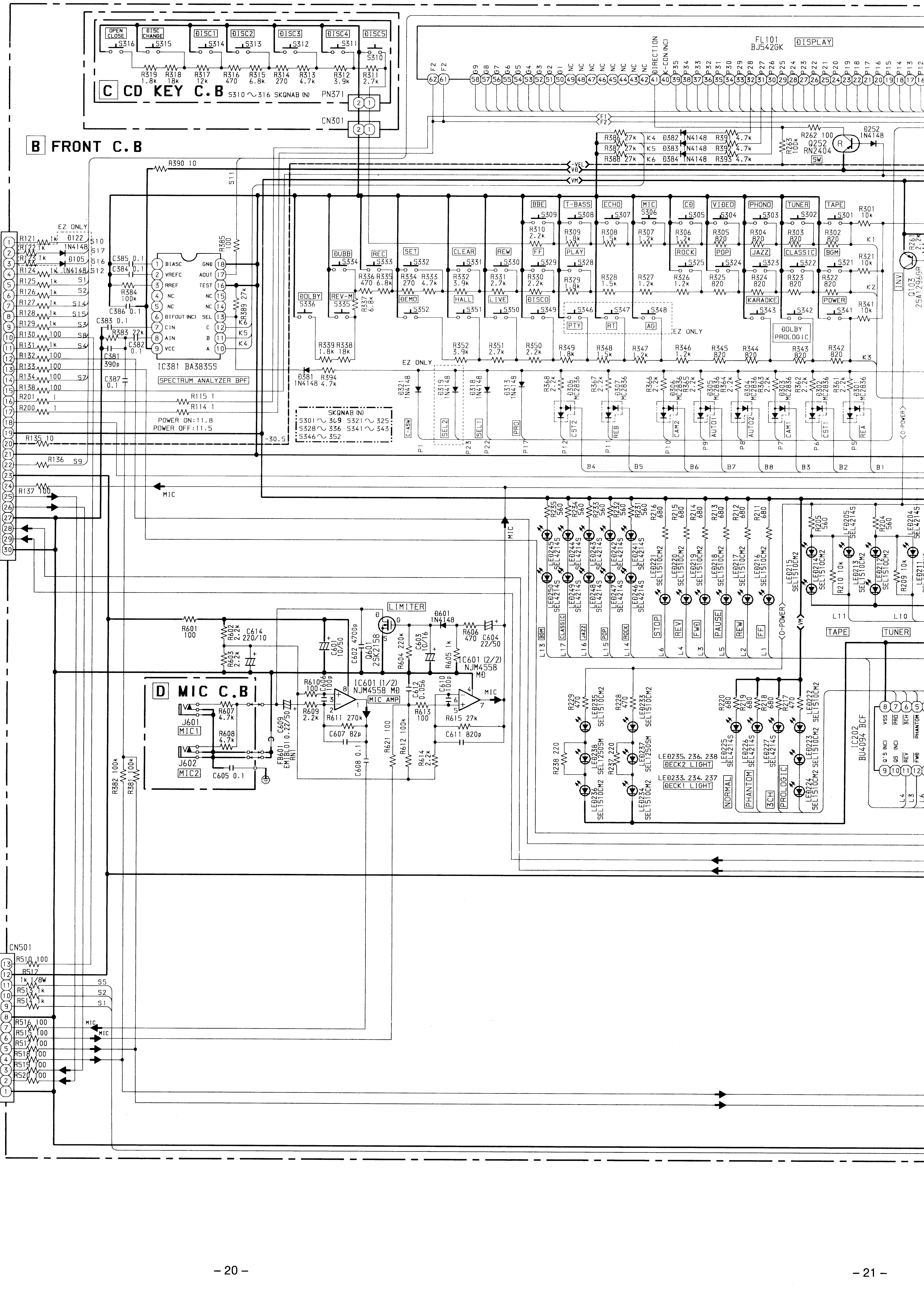
Z=High Impedance

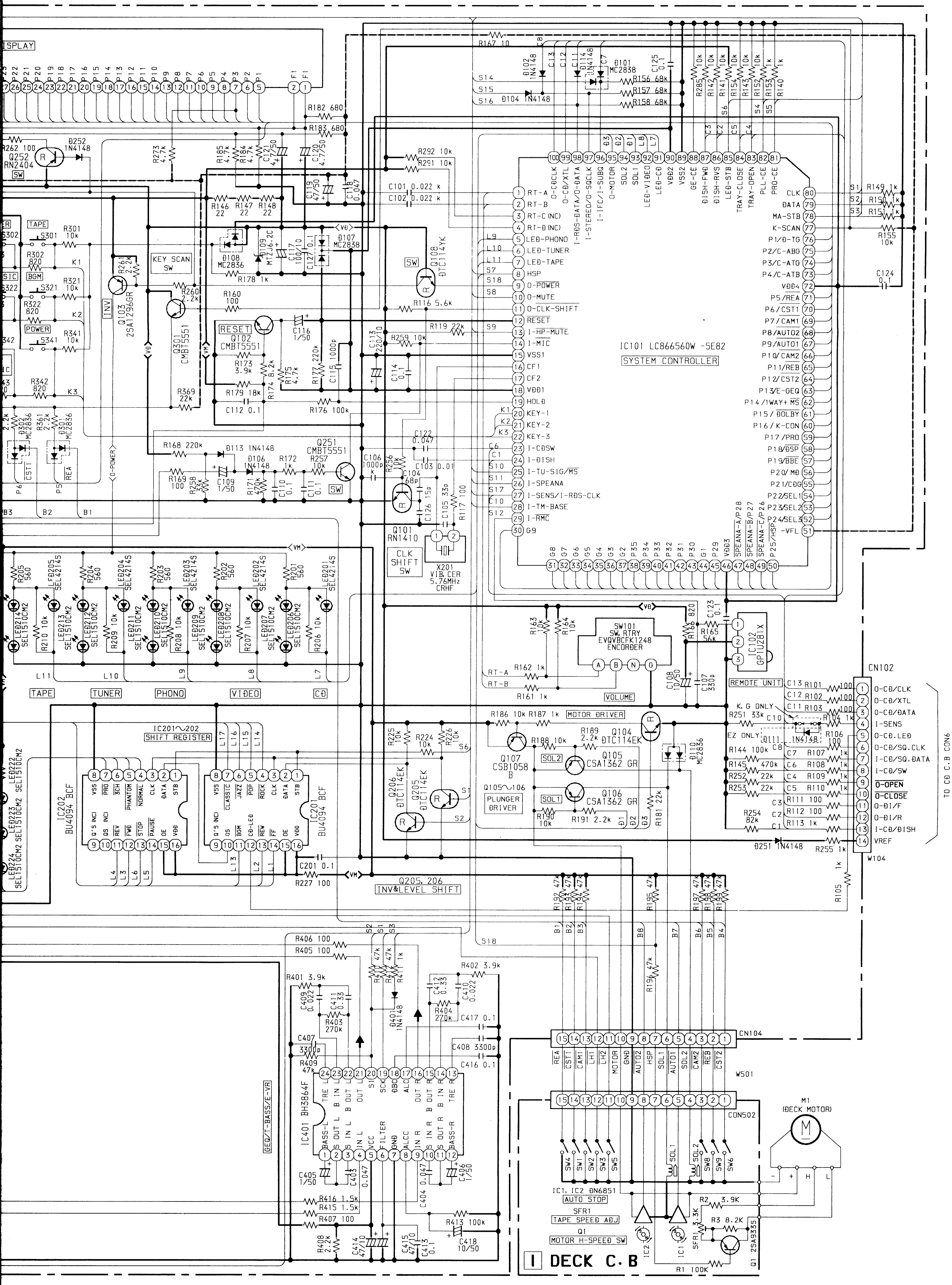
X=Đon't Care

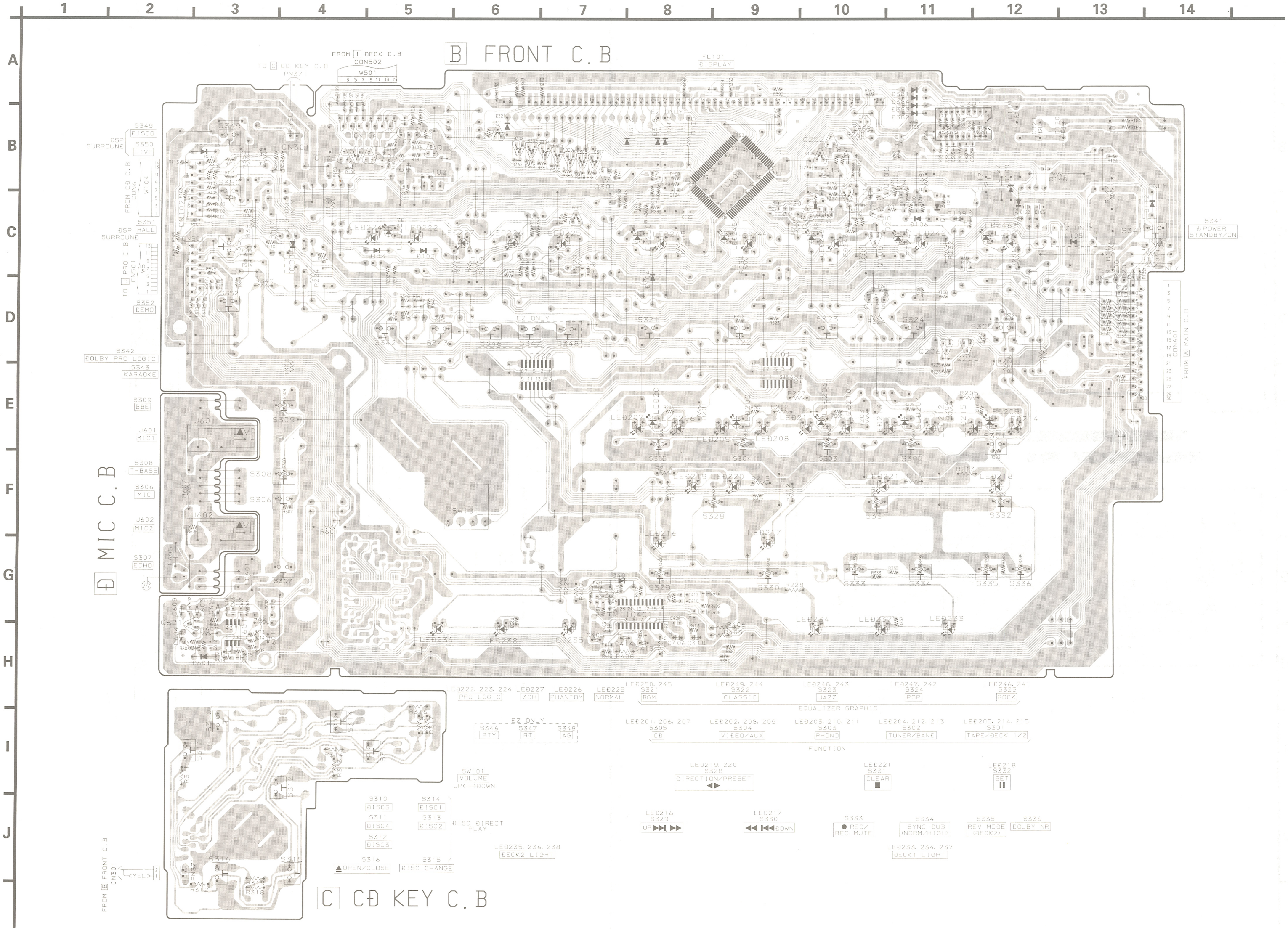
MAIN C.B


4
5
6
7
8
9
10
11
12
13
14
FROM H HEAD-2 C.B
CON351
1 3 5 7 8
TO PIN351
FROM G HEAD-1 C.B
CON301
1 3
TO PIN301
TO B FRONT C.B CON101
PIN301
PIN351
IC301
IC351
IC401
IC601
IC650
IC701
IC770
<EZ ONLY>
J252
PHONES
R258
R257
R260
R259
Q101
Q102
Q209
Q210
Q211
Q212
Q220
RY101
D101
D102
CON602
FFE801
CF801
CF802
SFR301
SFR302
SFR303
SFR304
SFR305
SFR306
SFR351
SFR352
L351
L770
R256

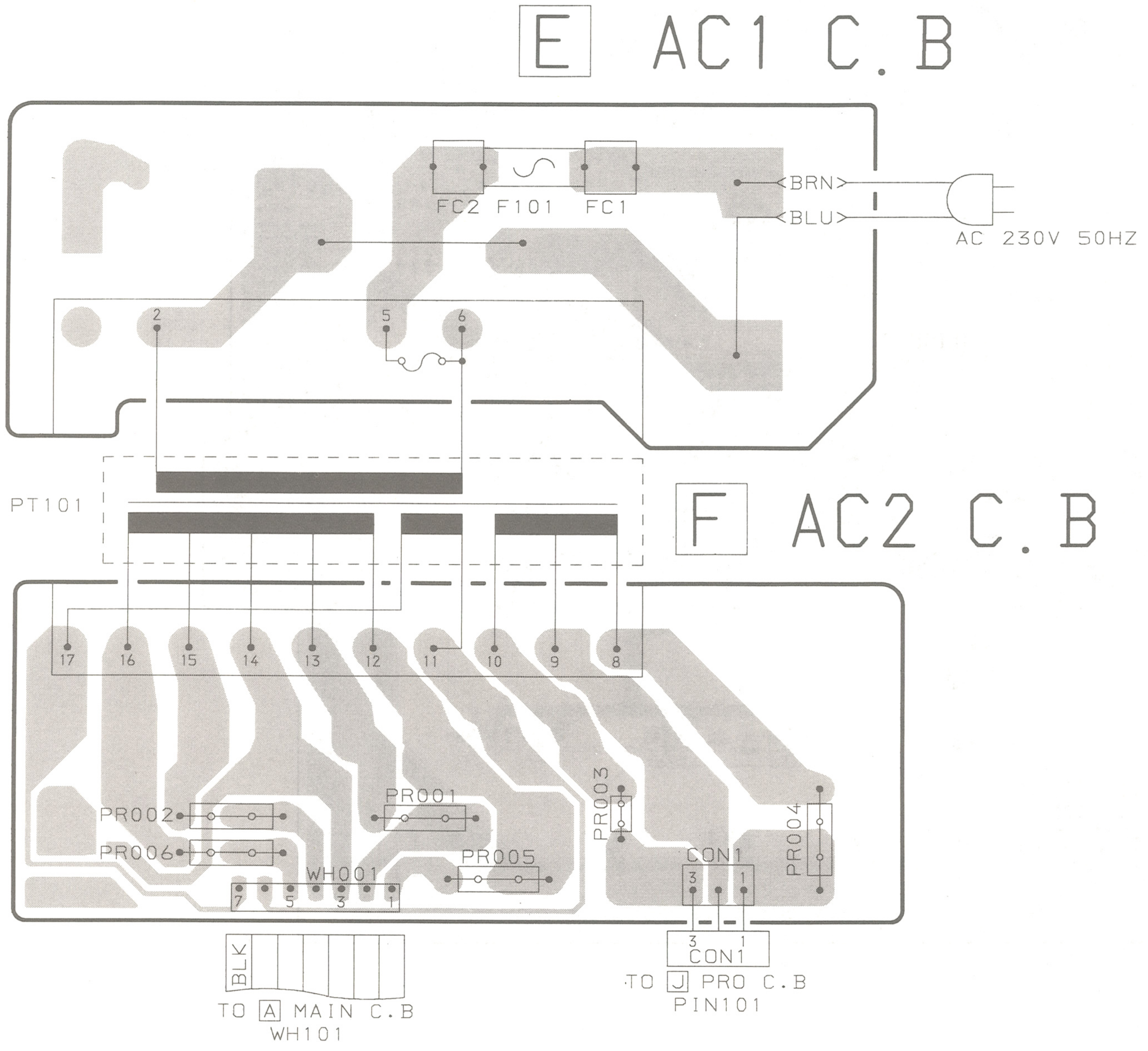
SCHEMATIC DIAGRAM – 2 (FRONT)


C CD KEY C.B
S310～316 SKQNAB (N)
PN371
CN301
B FRONT C.B
D MIC C.B
CN101
TO A MAIN C.B CN601
CN501
TO J PRO C.B CN501
FL101
BJ542GK
DISPLAY
IC381 BA3835S
SPECTRUM ANALYZER BPF
POWER ON:11.8
POWER OFF:11.5
SKQNAB (N)
S301～309 S321～325
S328～336 S341～343
S346～352
EZ ONLY
IC601 (1/2) NJM4558 MD
MIC AMP
IC601 (2/2) NJM4558 MD
LIMITER
Q601 2SK2158
J601 MIC1
J602 MIC2
Q252 RN2404
SW
Q103 2SA1296R
INV
IC202 BU4094 BCF
LED235, 236, 238 DECK2 LIGHT
LED233, 234, 237 DECK1 LIGHT
OPEN CLOSE
DISC CHANGE
DISC1
DISC2
DISC3
DISC4
DISC5
BBE
T-BASS
ECHO
MIC
CD
VIDEO
PHONO
TUNER
TAPE
FF
PLAY
ROCK
POP
JAZZ
CLASSIC
BGM
DUBB
REC
SET
CLEAR
REW
DOLBY
REV-M
DEMO
HALL
LIVE
DISCO
KARAOKE
POWER
PTY
RT
AG
DOLBY PROLOGIC
C-ASW
SEL2
SEL1
PRO
CST2
REB
CAM2
AUTO1
AUTO2
CAM1
CST1
REA
STOP
REV
FWD
PAUSE
NORMAL
PHANTOM
3CH
PROLOGIC
TU-SIG/MS
RDS-CLK
RDS-DATA
TM-BASE
CLK
DATA
TUNE/IFC
STEREO
MA-STB
MUTE
PLL-CE
LH1
LH2
HSP
O-POWER
F1
F2
HOLD
VM
-VFL
D-GND
HP-MUTE
VCC
MIC
IN-L
IN-R
A-GND
OUT-L
OUT-R
A-GND
D-MUTE
VCC
PRO-CE
DATA
CLK
GND
OUT-MIC
IN-MIC
IN-L
IN-R
OUT-R
OUT-L
GND

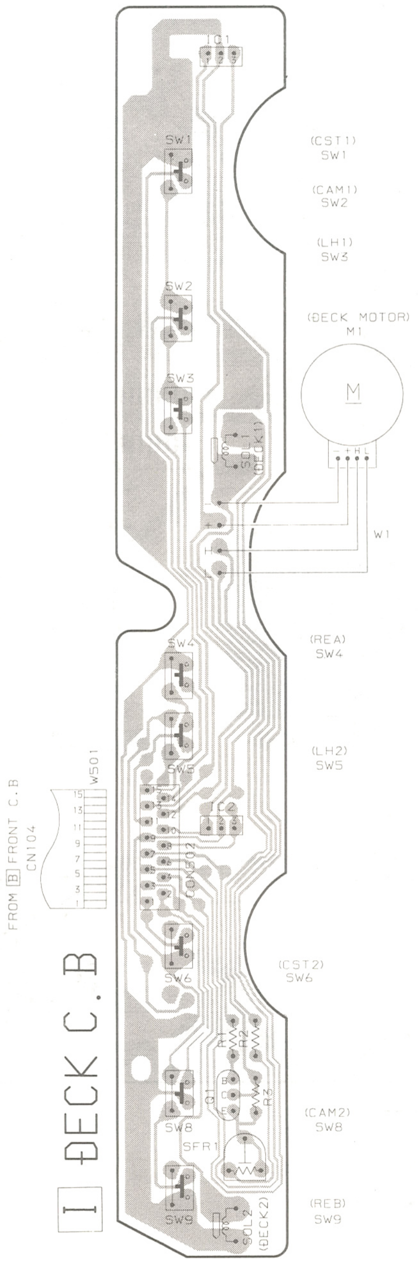

IC101 LC866560W -5E82
SYSTEM CONTROLLER
RESET
Q102 CMBT5551
KEY SCAN SW
INV
Q103 2SA1296GR
Q301 CMBT5551
Q108 DTC114YK
Q251 CMBT5551
Q101 RN1410
CLK SHIFT SW
X201 VIB.CER 5.76MHz CRHF
SW101 SW.RTRY EVQVBCFK1248 ENCODER
VOLUME
IC102 GP1U281X
REMOTE UNIT
MOTOR DRIVER
Q104 DTC114EK
Q105 CSA1362 GR
Q106 CSA1362 GR
Q107 CSB1058 B
Q105~106 PLUNGER DRIVER
SOL2
SOL1
Q205 DTC114EK
Q206 DTC114EK
Q205, 206 INV&LEVEL SHIFT
IC201~202 SHIFT REGISTER
IC201 BU4094 BCF
IC202 BU4094 BCF
TAPE
TUNER
PHONO
VIDEO
CD
IC401 BH3864F
GEQ/I-BASS/E-VR
CN102
TO CD C.B CN6
W104
CN104
W501
CON502
M1 (DECK MOTOR)
IC1, IC2 DN6851 AUTO STOP
SFR1 TAPE SPEED ADJ
Q1 MOTOR H-SPEED SW
I DECK C·B
SIGNAL: ← PB

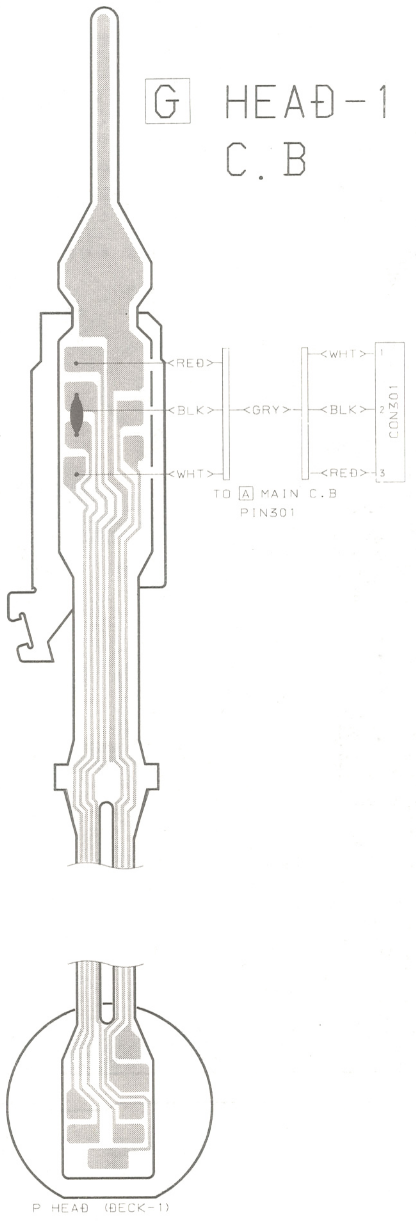

1
2
3
4
5
6
7
8
9
10
11
12
13
14
A
B
C
D
E
F
G
H
I
J
B FRONT C.B
FROM I DECK C.B
CON502
W501
TO C CD KEY C.B
PN371
FL101
DISPLAY
S349
DISCO
DSP SURROUND
S350
LIVE
FROM CD C.B
CON6
W104
S351
HALL
DSP SURROUND
TO J PRO C.B
CN501
W5
S352
DEMO
S342
DOLBY PRO LOGIC
S343
KARAOKE
S309
BBE
J601
MIC1
S308
T-BASS
S306
MIC
J602
MIC2
S307
ECHO
D MIC C.B
S341
POWER STANDBY/ON
CON601
FROM A MAIN C.B
EZ ONLY
IC101
IC201
IC202
IC301
IC401
SW101
LED222, 223, 224
PRO LOGIC
LED227
3CH
LED226
PHANTOM
LED225
NORMAL
LED250, 245
S321
BGM
LED249, 244
S322
CLASSIC
LED248, 243
S323
JAZZ
LED247, 242
S324
POP
LED246, 241
S325
ROCK
EQUALIZER GRAPHIC
EZ ONLY
S346
PTY
S347
RT
S348
AG
LED201, 206, 207
S305
CD
LED202, 208, 209
S304
VIDEO/AUX
LED203, 210, 211
S303
PHONO
LED204, 212, 213
S302
TUNER/BAND
LED205, 214, 215
S301
TAPE/DECK 1/2
FUNCTION
SW101
VOLUME
UP←→DOWN
LED219, 220
S328
DIRECTION/PRESET
◀▶
LED221
S331
CLEAR
■
LED218
S332
SET
❚❚
S310
DISC5
S311
DISC4
S312
DISC3
S314
DISC1
S313
DISC2
DISC DIRECT PLAY
S316
▲OPEN/CLOSE
S315
DISC CHANGE
LED216
S329
UP ▶▶| ▶▶
LED217
S330
◀◀ |◀◀ DOWN
S333
● REC/
REC MUTE
S334
SYNC DUB
(NORM/HIGH)
S335
REV MODE
(DECK2)
S336
DOLBY NR
LED235, 236, 238
DECK2 LIGHT
LED233, 234, 237
DECK1 LIGHT
FROM B FRONT C.B
CN301
YEL
C CD KEY C.B

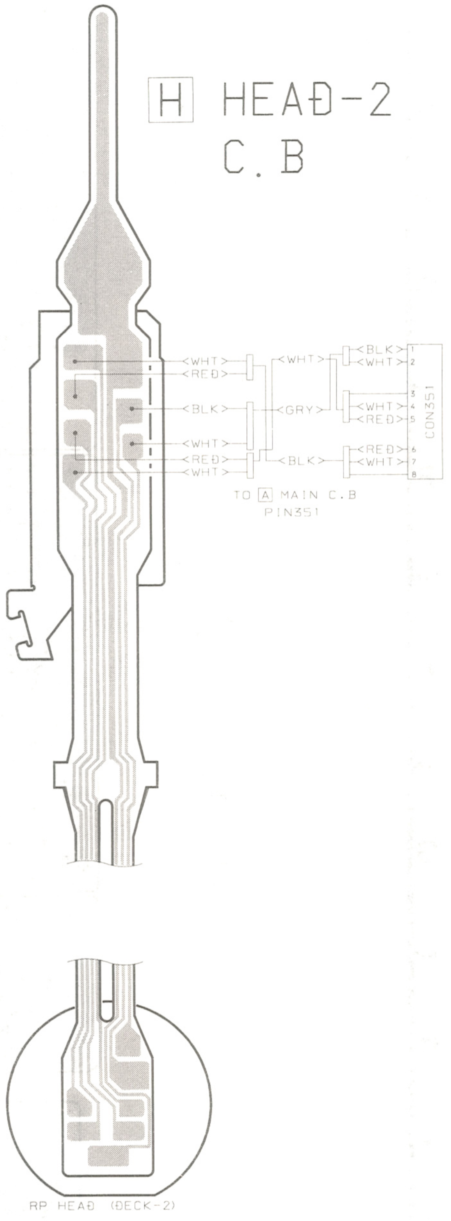
WIRING – 3 (AC1 / AC2)


E AC1 C.B
FC2 F101 FC1
<BRN>
<BLU>
AC 230V 50HZ
2
5
6
PT101
F AC2 C.B
17 16 15 14 13 12 11 10 9 8
PR002
PR006
PR001
PR003
PR005
PR004
WH001
7 5 3 1
CON1
3 1
BLK
TO A MAIN C.B
WH101
TO J PRO C.B
PIN101

WIRING – 4 (DECK / HEAD)


I DECK C.B
IC1
SW1
(CST1)
SW1
(CAM1)
SW2
(LH1)
SW3
SW2
SW3
(DECK MOTOR)
M1
M
– + H L
SOL1
(DECK1)
W1
SW4
(REA)
SW4
SW5
(LH2)
SW5
W501
FROM B FRONT C.B
CN104
15 13 11 9 7 5 3 1
IC2
CON502
SW6
(CST2)
SW6
R1
R2
R3
Q1
B C E
SW8
SFR1
(CAM2)
SW8
SW9
SOL2
(DECK2)
(REB)
SW9


G HEAD-1
C.B
<RED>
<BLK>
<WHT>
<GRY>
<WHT>
<BLK>
<RED>
1 2 3
CON301
TO A MAIN C.B
PIN301
P HEAD (DECK-1)


H HEAD-2
C.B
<WHT>
<RED>
<BLK>
<WHT>
<RED>
<WHT>
<WHT>
<GRY>
<BLK>
<BLK>
<WHT>
<WHT>
<RED>
<RED>
<WHT>
1 2 3 4 5 6 7 8
CON351
TO A MAIN C.B
PIN351
RP HEAD (DECK-2)

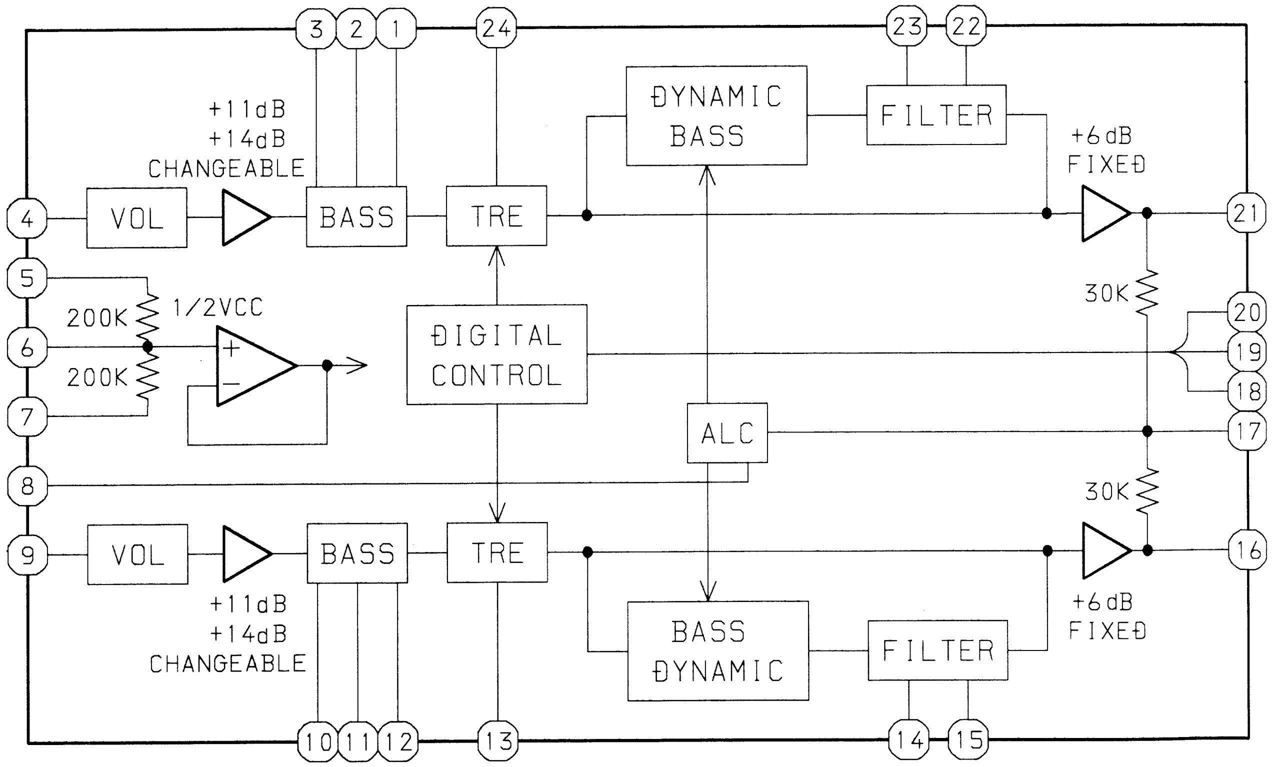
IC DESCRIPTION – 1

IC, NJW1102B

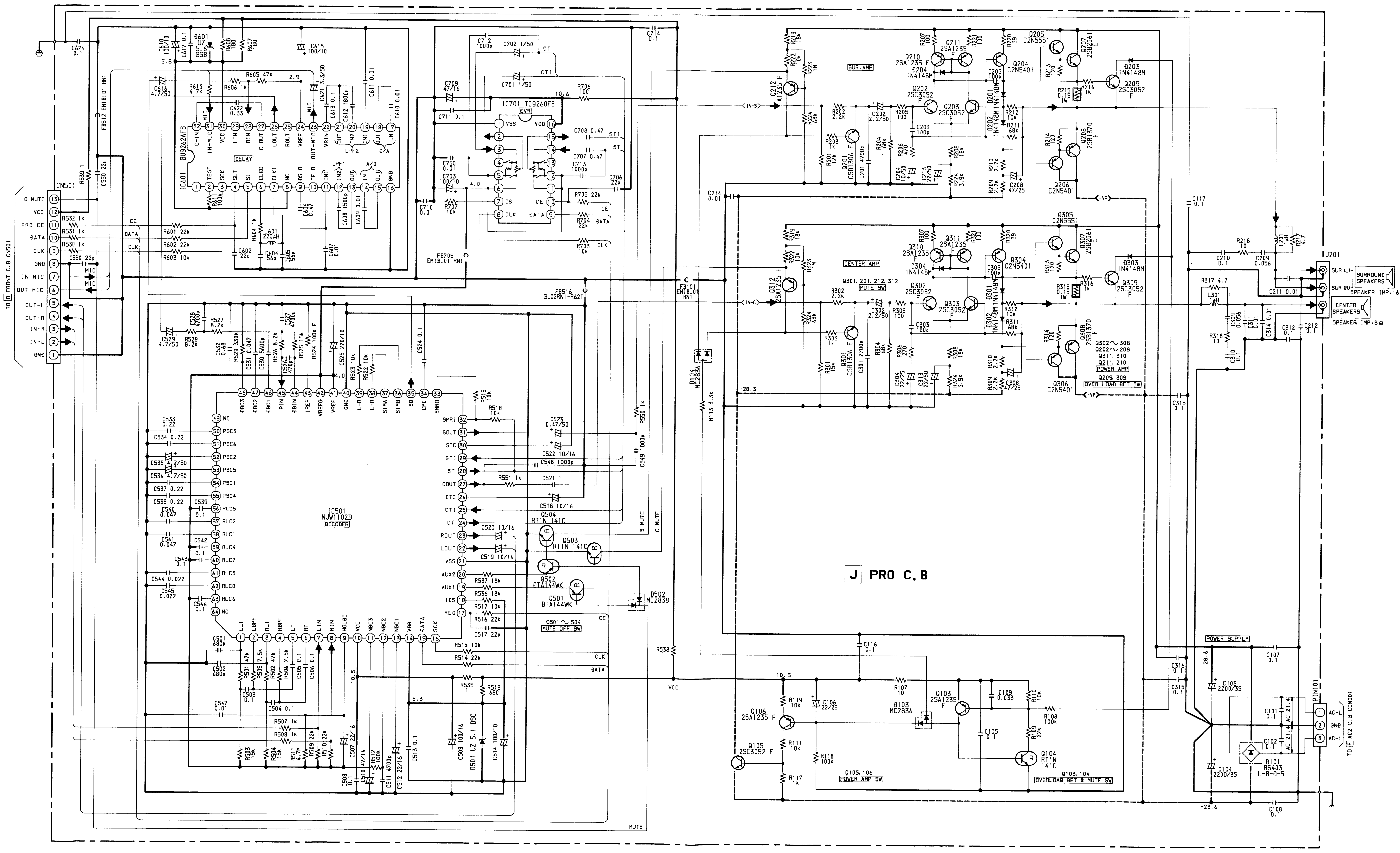
Pin No.	Pin Name	I/O	Description
1	LLI	I	L channel BPF in.
2	LBPF	O	L channel BPF feed back out.
3	RLI	I	R channel BPF in.
4	RBPF	O	R channel BPF feed back out.
5	LT	O	L channel selector #1 out.
6	RT	O	R channel selector #1 out·
7	LIN	I	L channel signal input.
8	RIN	I	R channelsignal input.
9	HOLDC	I	Auto input balance control.
10	VCC	–	Power supply.
11~13	NGC 3~1	I	Noise sequencer control.
14	VDD	–	Power supply.
15	DATA	I	Serial data input.
16	SCK	I	Serial clock input.
17	REQ	I	Serial request (strobe) input.
18	IDS	I	ID select sw.
19	AUX1	O	AUX1 output (serial data change parallel output).
20	AUX2	O	AUX2 output (serial data change parallel output).
21	VSS	–	GND.
22	LOUT	O	L channel signal output.
23	ROUT	O	R channel signal output.
24	CT	O	Center channel output (before trimmer).
25	CTI	I	Center channel trimmer input.
26	CTC	O	Center channel trimmer coupling capacitor out.
27	COUT	O	Center channel trimmer output.
28	ST	O	Surround channel output (before trimmer).
29	STI	I	Surround channel trimmer input.
30	STC	O	Surround channel trimmer coupling capacitor out.
31	SOUT	O	Surround channel trimmer output.
32	SMRI	I	Surround channel amp (front L,R mix) input.
33	SMRO	O	Surround channel amp (front L,R mix) output.
34	CMC	O	Center mode control.
35	SD	O	Selector #2 output (to surround channel delay).
36	SIMB	I	Selector #2 input B (L-R).
37	SIMA	I	Selector #2 input A (L+R).
38	L+R	O	L+R channel output.
39	L-R	O	L-R channel output.
40	GND	–	Ground.
41	VREF	I	VREF in.
42	VREFG	O	Vref out.
43	IREF	I	Iref in.
44	DBIN	I	To modify B NR decoder input.
45	LPIN	I	From surround channel delay input.
46~48	DBC 1~3	I	Dolby B NR control 1~3.
49	NC	–	Not used.
50~55	PSC 1~6	I	Dual time constant and threshold switches control.
56~63	RLC 1~8	I	Full wave rectifier and log difference amp control.
64	NC	–	Not used.

IC BLOCK DIAGRAM – 3

IC, BH3864F

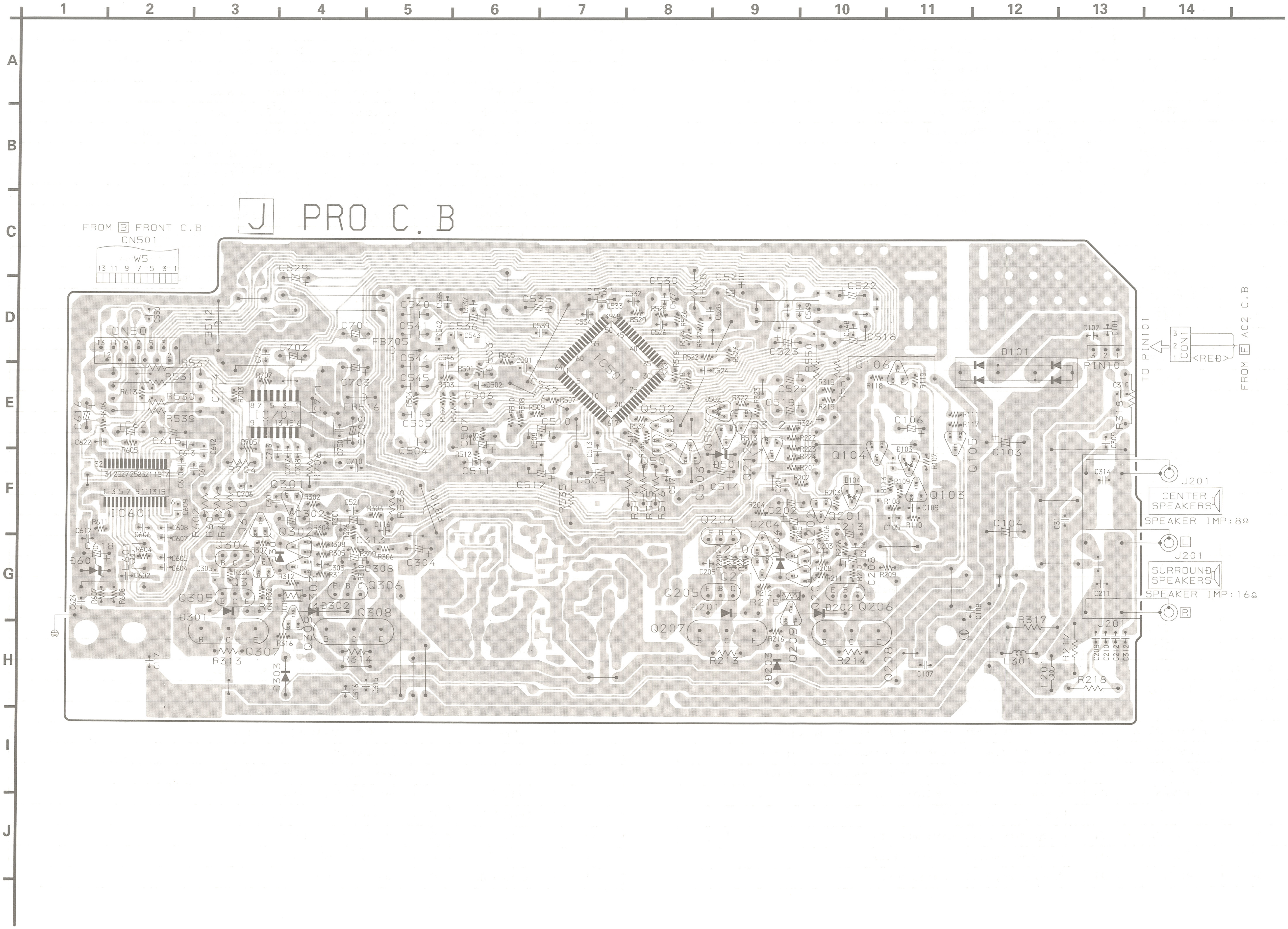

3
2
1
24
23
22
DYNAMIC BASS
FILTER
+11dB
+14dB
CHANGEABLE
+6dB
FIXED
4
VOL
BASS
TRE
21
5
200K
1/2VCC
30K
DIGITAL CONTROL
20
6
19
18
200K
7
ALC
17
8
30K
9
VOL
BASS
TRE
16
+11dB
+14dB
CHANGEABLE
+6dB
FIXED
BASS DYNAMIC
FILTER
10
11
12
13
14
15

SCHEMATIC DIAGRAM – 3 (PRO)



J PRO C.B
CN501
TO B FRONT C.B CN501
D-MUTE
VCC
PRO-CE
DATA
CLK
GND
IN-MIC
OUT-MIC
OUT-L
OUT-R
IN-R
IN-L
GND
IC601 BU9262AFS
DELAY
IC701 TC9260FS
EVR
IC501 NJW1102B
DECODER
FB512 EM1BL01 RN1
FB705 EM1BL01 RN1
FB516 BL02RN1-R62T
FB101 EM1BL01 RN1
SUR.AMP
CENTER AMP
Q301, 201, 212, 312
MUTE SW
Q302~306
Q202~208
Q311, 310
Q211, 210
POWER AMP
Q209, 309
OVER LOAD DET SW
Q501~504
MUTE OFF SW
Q105, 106
POWER AMP SW
Q103, 104
OVERLOAD DET & MUTE SW
POWER SUPPLY
D101 RS403 L-B-D-51
J201
SUR (L)
SUR (R)
SURROUND SPEAKERS
SPEAKER IMP:16Ω
CENTER SPEAKERS
SPEAKER IMP:8Ω
P(N101)
AC-L
GND
AC-L
TO F AC2 C.B CON001
S-MUTE
C-MUTE
MUTE
VCC
-28.3
-28.6
28.6
10.5

WIRING – 5 (PRO)


1
2
3
4
5
6
7
8
9
10
11
12
13
14
A
B
C
D
E
F
G
H
I
J
J PRO C.B
FROM B FRONT C.B
CN501
W5
13 11 9 7 5 3 1
IC501
IC601
IC701
D101
PIN101
TO PIN101
FROM F AC2 C.B
CON1
<RED>
J201
CENTER SPEAKERS
SPEAKER IMP:8Ω
L
J201
SURROUND SPEAKERS
SPEAKER IMP:16Ω
R
J201

IC DESCRIPTION – 2

IC, LC866560W-5E82

Pin No.	Pin Name	I/O	Description
1	RT-A	I	ROTARY ENCORDER Volume in.
2	RT-B	I	ROTARY ENCORDER Volume in.
3	RT-C	I	ROTARY ENCORDER Multi Jog in. (Not used)
4	RT-D	I	ROTARY ENCORDER Multi Jog in. (Not used)
5	LED-PHONO	O	Function LED PHONO control.
6	LED-TUNER	O	Function LED TUNER control.
7	LED-TAPE	O	Function LED TAPE control.
8	HSP	O	DECK high-speed dubbing control.
9	O-$\overline{\text{POWER}}$	O	System power supply $\overline{\text{ON}}$/OFF output.
10	O-MUTE	O	System mute output.
11	O-$\overline{\text{CLK-SHIFT}}$	O	Micon clock shift output.
12	$\overline{\text{RESET}}$	I	Reset input.
13	I-$\overline{\text{HP-MUTE}}$	I	"L" input PROLOGIC, DSP OFF. (Not used)
14	I-$\overline{\text{MIC}}$	I	Microphone input for auto vocal fader ON/OFF .
15	VSS1	–	GND terminal.
16, 17	CF1, CF2	–	5.76 MHz oscillator circuit.
18	VDD1	–	Power supply input. Connected to VDD2.
19	HOLD	I	Power failure detected. More than 4.9V | 4.9V ~ 3.49V | 3.49V ~ 1.41V | Less than 1.41V P-OFF | Normal condition | P-OFF | HOLD mode
20 ~ 22	KEY1 ~ 3	I	Key input.
23	I-CDSW	I	CD mechanical switch A/D converter input.
24	I-DISH	I	CD turntable photo sensor A/D converter input.
25	I-TU-SIG/$\overline{\text{MS}}$	I	Tuner function: Tuner $\overline{\text{SD}}$ detected input. Tape function: Deck music sensor signal input.
26	I-SPEANA	I	A/D input for spectrum analyzer display.
27	I-SENS/I-RDS-CLK	I	CD function: CD IC control data bus data input. Tuner function: RDS clock input. (Not used)
28	I-TM BASE	I	Reference clock input for timer watch.
29	I-$\overline{\text{RMC}}$	I	System remote control signal input.
30 ~ 37, 44	G9 ~ G1	O	FL grid output G9 ~ G1.
38 ~ 43, 45	P35 ~ P29	O	FL segment output P35 ~ P29.
46	VDD3	–	Power supply input. Connected to VDD4.
47	P28/SPEANA-A	O	FL segment output P28 / spectrum analyzer band pass filter control A.
48	P27/SPEANA-B	O	FL segment output P27 / spectrum analyzer hand pass filter control B.
49	P26/SPEANA-C	O	FL segment output P26 / spectrum analyzer band pass filter control C.
50	P25/$\overline{\text{HSP}}$	O/I	FL segment output P25 / $\overline{\text{HSP}}$ diode detect.
51	–VFL	–	Power supply input for FL display.
52	P24/SEL3	O/I	FL segment output P24 / tuner band select 3.
53	P23/SEL2	O/I	FL segment output P23 / tuner band select 2.
54	P22/SEL1	O/I	FL segment output P22 / tuner band select 1.
55	P21/CDG	O/I	FL segment output P21 / CDG diode detect.
56	P20/MD	O/I	FL segment output P20 / MD diode detect.
57	P19/BBE	O/I	FL segment output P19 / BBE diode detect.
58	P18/$\overline{\text{DSP}}$	O/I	FL segment output P18 / $\overline{\text{DSP}}$ diode detect.
59	P17/D-SURR	O/I	FL segment output P17 / D-SURR diode detect. (Not used)
60	P16/K-CON	O/I	FL segment output P16 / K-CON diode detect.
61	P15/DOLBY	O/I	FL segment output P15 / $\overline{\text{DOLBY-NR}}$ diode detect.
62	P14/1WAY+$\overline{\text{MS}}$	O/I	FL segment output P14 / 1WAY+$\overline{\text{MS}}$ diode detect.
63	P13/E-GEQ	O/I	FL segment output P13 / E-GEQ diode detect.
64	P12/$\overline{\text{CST2}}$	O/I	FL segment output P12 / DECK2 cassette detect switch input.
65	P11/$\overline{\text{REB}}$	O/I	FL segment output P11 / DECK2 side-B record OK switch input.
66	P10/$\overline{\text{CAM2}}$	O/I	FL segment output P10 / DECK2 cam switch input.
67	P9/$\overline{\text{AUTO1}}$	O/I	FL segment output P9 / DECK1 auto stop signal input.
68	P8/$\overline{\text{AUTO2}}$	O/I	FL segment output P8 / DECK2 auto stop signal input.
69	P7/$\overline{\text{CAM1}}$	O/I	FL segment output P7 / DECK1 cam switch input.
70	P6/$\overline{\text{CST1}}$	O/I	FL segment output P6 / DECK1 cassette detect switch input.
71	P5/$\overline{\text{REA}}$	O/I	FL segment output P5 / DECK2 side-A record OK switch input.
72	VDD4	–	Power supply input. Connected to VDD3.
73	P4/C-ATB	O/I	FL segment output P4 / CD auto adjust SW input.
74	P3/C-ATG	O/I	FL segment output P3 / CD auto adjust SW input.
75	P2/C-ABG	O/I	FL segment output P2 / CD auto adjust SW input.
76	P1/D-TG	O/I	FL segment output P1 / CD auto adjust SW input.
77	K-SCAN	O	Switch scan timing output.
78	MA-STB	O	Main shift register data latch strobe output.
79	DATA	O	All serial IC data output.
80	CLK	O	All serial IC clock output.
81	PRO-CE	O	PRO-LOGIC data latch strobe output. (Not used)
82	PLL-CE	O	PLL IC (LC72131D) chip enable output.
83	TRAY-OPEN	O	CD tray open data output.
84	TRAY-CLOSE	O	CD tray close data output.
85	LED-STB	O	Front shift register data latch strobe output.
86	DISH-RVS	O	CD turntable reverse rotation output.
87	DISH-FWD	O	CD turntable forward rotation output.
88	GE-CE	O	E-GEQ IC (M62431FP) chip enable.
89	VSS2	–	GND terminal.
90	VDD2	–	Power supply input. Connected to VDD1.
91	LED-CD	O	Function LED CD control.
92	LED-VIDEO	O	Function LED video control.
93	SOL1	O	DECK1 solenoid output.
94	SOL2	O	DECK2 solenoid output.
95	O-MOTOR	O	DECK motor output.

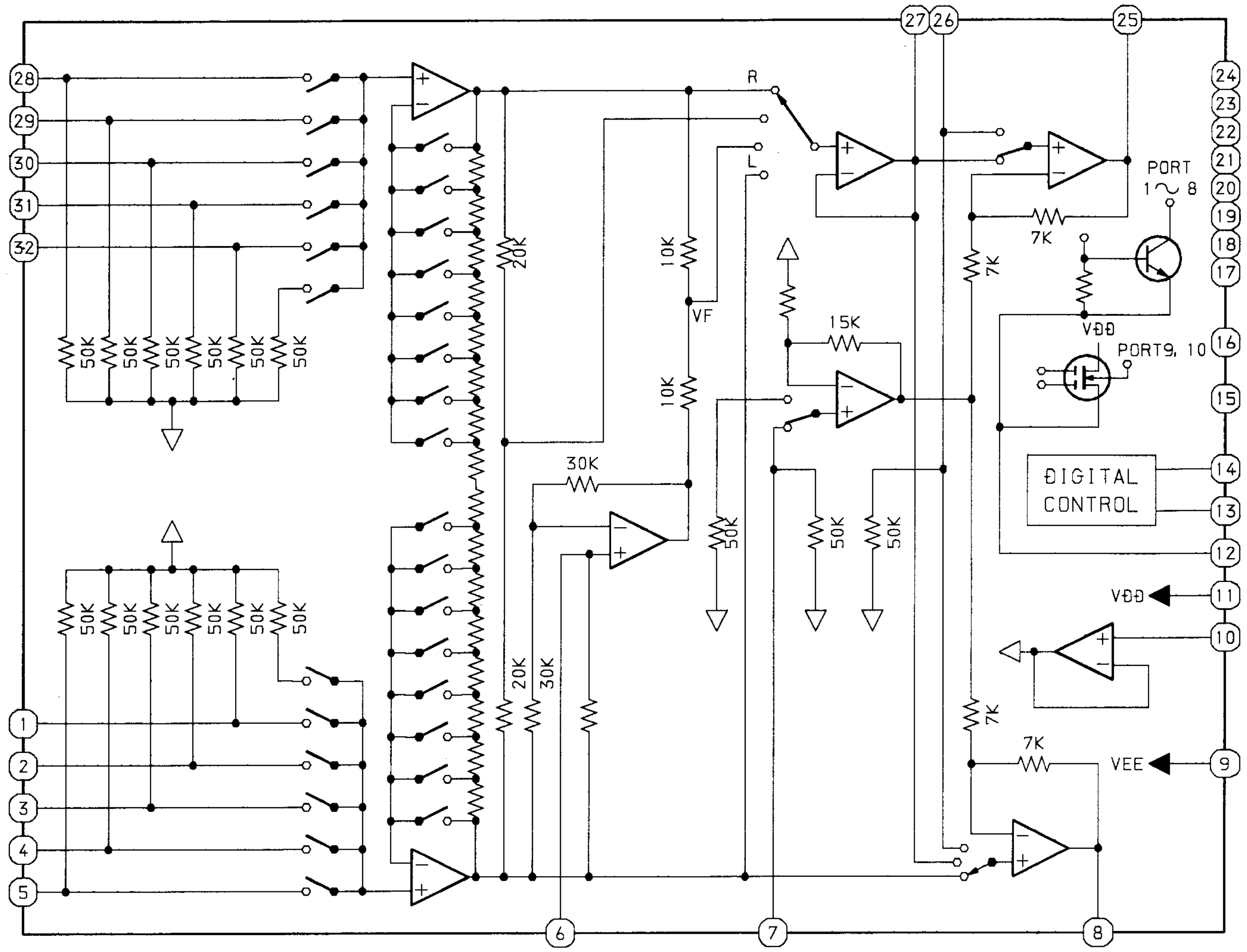
Pin No.	Pin Name	I/O	Description
96	I-IFC/I-SUBQ	I	Tuner function: IF count serial data input. CD function: CD IC data input.
97	I-STEREO/O-SQ CLK	I O	Tuner function: Tuner stereo detect input. CD function: CD IC control data bus clock output.
98	I-RDS-DATA/O-DATA	I O	Tuner function: RDS data input. (Not used) CD function: CD IC control data bus data output.
99	O-CD/XTL	O	CD IC control latch strobe output.
100	O-CDCLK	O	CD IC control clock output.

IC, LC72131D

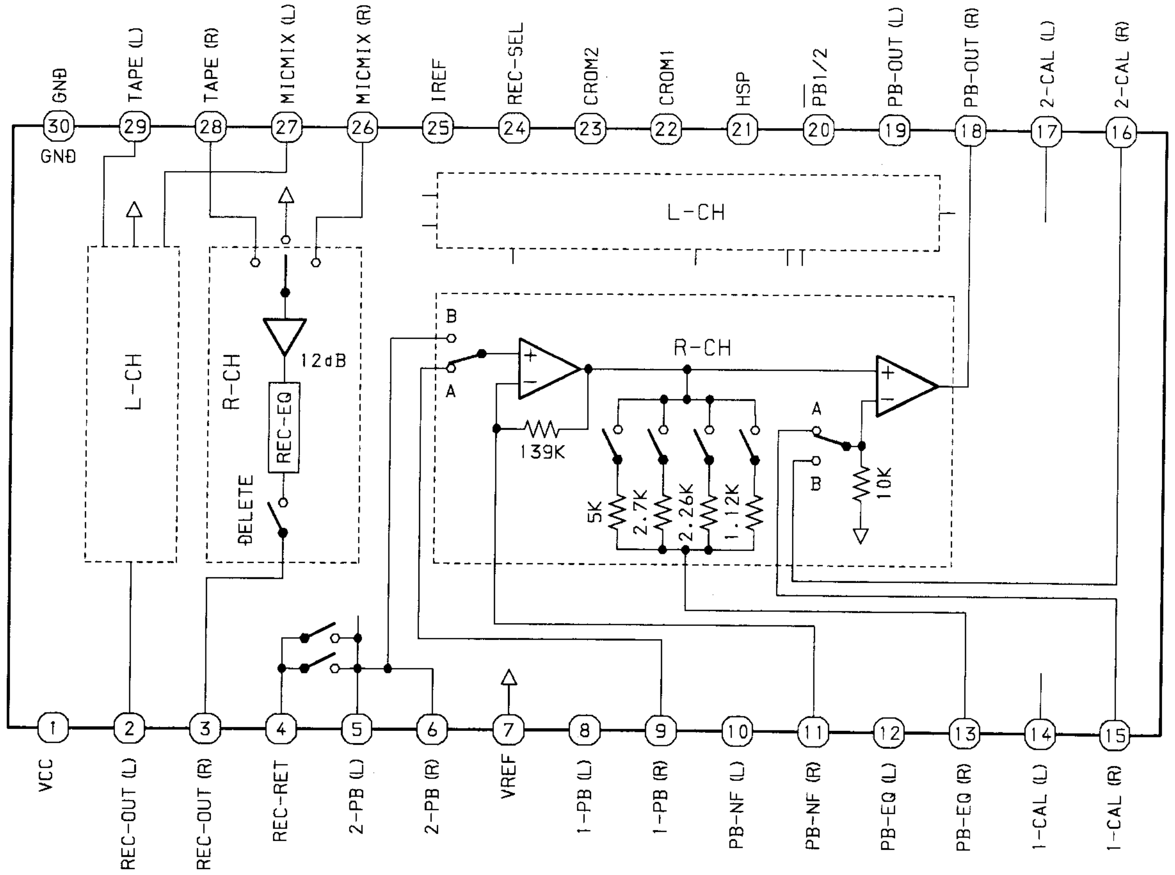
<table>
<tr><th>Pin No.</th><th>Pin Name</th><th>I/O</th><th>Description</th></tr>
<tr><td>1</td><td>X IN</td><td>I</td><td rowspan="2">A crystal oscillator (7.2MHz) is connected between these pins.</td></tr>
<tr><td>22</td><td>X OUT</td><td>O</td></tr>
<tr><td>2</td><td>NC</td><td>–</td><td>Not used.</td></tr>
<tr><td>3</td><td>CE</td><td>I</td><td>To enable the IC. Active "H".</td></tr>
<tr><td>4</td><td>DI</td><td>I</td><td>Digital data input from CPU (LC866560W-5E82) when relevant key is operated. Active "H".</td></tr>
<tr><td>5</td><td>CL</td><td>I</td><td>To clock in the data DI.</td></tr>
<tr><td>6</td><td>DO</td><td>O</td><td>Digital data output to CPU (LC866560W-5E82).</td></tr>
<tr><td>7</td><td>T-BASE</td><td>O</td><td>Outputs a reference clock signal (8Hz) for the clock.</td></tr>
<tr><td>8</td><td>$\overline{\text{MONO}}$ / BEAT</td><td>O</td><td>Outputs "H" when MONO / BEAT is switched.</td></tr>
<tr><td>9</td><td>$\overline{\text{FM}}$ / $\overline{\text{SW}}$</td><td>O</td><td>Output "L" or "H" as follows:
<table>
<tr><th colspan="2">2 BAND</th><th colspan="3">3 BAND</th><th colspan="3">3 BAND</th></tr>
<tr><td>AM</td><td>FM</td><td>LW</td><td>MW</td><td>FM</td><td>MW</td><td>SW</td><td>FM</td></tr>
<tr><td>H</td><td>L</td><td>H</td><td>H</td><td>L</td><td>H</td><td>L</td><td>L</td></tr>
</table></td></tr>
<tr><td>10</td><td>$\overline{\text{MW}}$ / SW</td><td>O</td><td>Outputs "L" or "H" as follows:
<table>
<tr><th colspan="2">2 BAND</th><th colspan="3">3 BAND</th><th colspan="3">3 BAND</th></tr>
<tr><td>AM</td><td>FM</td><td>LW</td><td>MW</td><td>FM</td><td>MW</td><td>SW</td><td>FM</td></tr>
<tr><td>L</td><td>L</td><td>H</td><td>L</td><td>L</td><td>L</td><td>H</td><td>L</td></tr>
</table></td></tr>
<tr><td>11</td><td>IF-MUTE</td><td>O</td><td>To control internal counter.</td></tr>
<tr><td>12</td><td>IF-IN</td><td>I</td><td>General purpose counter input.</td></tr>
<tr><td>13</td><td>$\overline{\text{TUNE}}$</td><td>I</td><td>Receives "L" when station is tuned.</td></tr>
<tr><td>14</td><td>NC</td><td>–</td><td>Not used.</td></tr>
<tr><td>15</td><td>AM-IN</td><td>I</td><td>Receives the AM local oscillator frequency signal.</td></tr>
<tr><td>16</td><td>FM-IN</td><td>I</td><td>Receives the FM local oscillator frequency signal.</td></tr>
<tr><td>17</td><td>VDD</td><td>–</td><td>Supply power to IC (+5V).</td></tr>
<tr><td>18</td><td>PD</td><td>O</td><td>PLL charge pump output.</td></tr>
<tr><td>19</td><td>A-IN</td><td>I</td><td rowspan="2">The MOS transistor for PLL active low pass filter.</td></tr>
<tr><td>20</td><td>A-OUT</td><td>O</td></tr>
<tr><td>21</td><td>VSS</td><td>–</td><td>Ground.</td></tr>
</table>

IC BLOCK DIAGRAM – 4

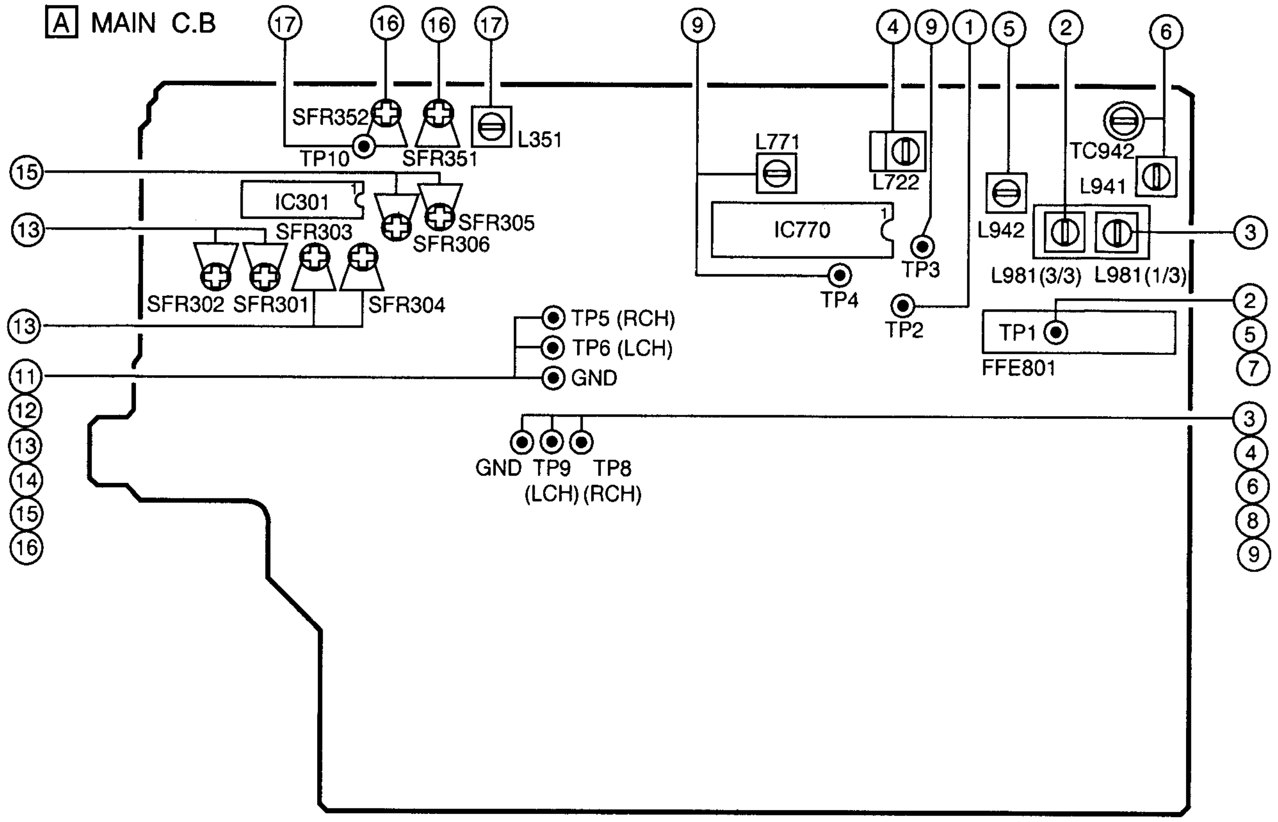
IC, BH3810FS

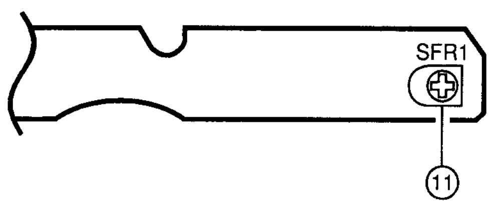

28
29
30
31
32
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
50K
20K
30K
10K
VF
15K
7K
R
L
PORT
1～8
VDD
PORT9, 10
DIGITAL
CONTROL
VDD
VEE

IC, HA12211

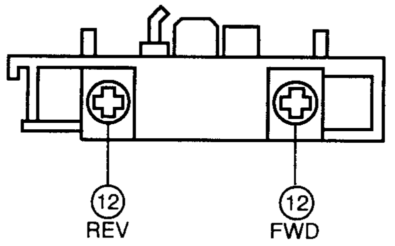

GND
TAPE (L)
TAPE (R)
MICMIX (L)
MICMIX (R)
IREF
REC-SEL
CROM2
CROM1
HSP
$\overline{\text{PB}}$1/2
PB-OUT (L)
PB-OUT (R)
2-CAL (L)
2-CAL (R)
30
29
28
27
26
25
24
23
22
21
20
19
18
17
16
GND
L-CH
R-CH
12dB
REC-EQ
DELETE
L-CH
R-CH
B
A
139K
5K
2.7K
2.26K
1.12K
10K
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
VCC
REC-OUT (L)
REC-OUT (R)
REC-RET
2-PB (L)
2-PB (R)
VREF
1-PB (L)
1-PB (R)
PB-NF (L)
PB-NF (R)
PB-EQ (L)
PB-EQ (R)
1-CAL (L)
1-CAL (R)

ADJUSTMENT





DECK-1 P HEAD, DECK-2 R/P/E HEAD



< TUNER SECTION >

1. Clock Frequency Check
   Settings : • Test point : TP2 (CLK)
   Method : Set to AM 1602kHz and check that the test point is 2052kHz ± 45Hz.

2. AM VT Adjustment
   Settings : • Test point : TP1 (VT)
   • Adjustment location : L981 (3/3)
   Method : Set to AM 531kHz and adjust L981 (3/3) so that the test point is 1.5V ± 0.05V.

3. AM Tracking Adjustment
   Settings : • Test point : TP9 (Lch), TP8 (Rch)
   • Adjustment location : L981 (1/3)
   Method : Set to AM 1000kHz and adjust L981 (1/3) so that the test point becomes maximum.

4. AM IF Adjustment
   Settings : • Test point : TP9 (Lch), TP8 (Rch)
   • Adjustment location :
   L772 .... 999kHz

5. LW VT Adjustment (EZ,K)
   Settings : • Test point : TP1 (VT)
   • Adjustment location : L942
   Method : Set to LW 144kHz and adjust L942 so that the test point is 1.3V ± 0.05V. Then set to LW 290kHz and check the test point is less than 6.0V.

6. LW Tracking adjustment
   Settings : • Test point : TP9 (Lch), TP8 (Rch)
   • Adjustment location : L941, TC942
   Method: Set to LW 144kHz (290kHz) and adjust L941 (TC942) so that the test point becomes maximum.

7. FM VT Check
   Settings : • Test point : TP1 (VT)
   Method : Set to FM 87.5MHz (108.0MHz) and check that the test point is more than 1.0V (less than 8.0V).

8. FM Tracking Check
   Settings : • Test point : TP9 (Lch), TP8 (Rch)
   Method : Set to FM 98.0MHz and check that the test point is 7dB ± 6dB at distortion less than 3%.

9. DC Balance / Mono Distortion Adjustment
   Settings : • Test point : TP3,TP4 (DC balance)
   TP8,TP9 (Distortion)
   • Adjustment location : L771
   • Input level : 54dB
   Method : Set to FM 98.0MHz and adjust L771 so that the voltage (TP3 and TP4) output becomes 0V ± 0.04V.
   Next, check that the distortion is less than 1.3%.

10. Auto Stop Level Check
    AM
    Settings : • Input level : Variable
    Method : Check the auto stop at AM 999kHz and the input level is 50dB ± 10dB.

    FM
    Settings : • Input level : Variable
    Method : Check the auto stop at FM 98.0MHz and the input level is 20dB ~ 35dB.

    LW
    Settings : • Input level : Variable
    Method : Check the auto stop at LW 198kHz and the input level is 54dB ~ 74dB.

< DECK SECTION >

11. Tape Speed Adjustment (DECK2)
    Settings : • Test tape : TTA–100
    • Test point : TP6 (Lch), TP5 (Rch)
    • Adjustment location : SFR1
    Method : Play back the test tape and adjust SFR1 so that the test point becomes 3000Hz ± 5Hz(FWD) and FWD PLAY speed ± 45Hz(REV).

12. Head Azimuth Adjustment (DECK1, DECK2)
    Settings : • Test tape : TTA–300
    • Test point : TP6 (Lch), TP5 (Rch)
    • Adjustment location : Head azimuth adjustment screw
    Method : Play back the 10kHz signal of the test tape and adjust screw so that the output becomes maximum. Next, perform on each FWD PLAY and REV PLAY mode.

13. PB Sensitivity Adjustment (DECK1, DECK2)
    Settings : • Test tape : TTA–200
    • Test point : TP6 (Lch), TP5 (Rch)
    • Adjustment location :
    SFR301 (DECK1, Lch)
    SFR302 (DECK1, Rch)
    SFR303 (DECK2, Lch)
    SFR304 (DECK2, Rch)
    Method : Play back the test tape and adjust SFRs so that the output level of the test point becomes 245mV.

14. PB Frequency Response Check (DECK1, DECK2)
    Settings : • Test tape : TTA–300
    • Test point : TP6 (Lch), TP5 (Rch)
    Method : Play back the 315Hz and 10kHz signals of the test tape and check that the output ratio of the 10kHz signal with respect to that of the 315Hz signal is 0dB ± 3dB.
    Next, check that the Lch and Rch difference level of 10kHz signal is less than 2dB.

15. REC/PB Sensitivity Adjustment (DECK2)
    Settings : • Test tape : TTA–602
    • Test point : TP6 (Lch), TP5 (Rch)
    • Input signal : 1kHz (LINE IN)
    • Adjustment location : SFR305 (Lch)
    SFR306 (Rch)
    Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP5, TP6 becomes 12mV.
    Record and play back the 1kHz signals and adjust SFRs so that the output is 0dB ± 0.5dB.

16. REC/PB Frequency Response Adjustment (DECK2)
    Settings : • Test tape : TTA–602
    • Test point : TP6 (Lch), TP5 (Rch)
    • Input signal : 1kHz / 10kHz (LINE IN)
    • Adjustment location : SFR351 (Lch)
    SFR352 (Rch)
    Method : Apply a 1kHz signal and REC mode.
    Then adjust OSC attenuator so that the output level at the TP5, TP6 becomes 12mV. Record and play back the 1kHz and 10kHz signals and adjust SFRs so that the output level of the 10kHz signals becomes 0dB ± 0.5dB with respect to that of the 1kHz signal.

17. Bias OSC Frequency Adjustment (DECK2)
    Settings : • Test point : TP10 (BIAS)
    • Adjustment location : L351
    Method : Set DECK2 to the REC mode and adjust L351 so that the frequency at the test point is 85kHz ± 1kHz.

PRACTICAL SERVICE FIGURE

<TUNER SECTION>

<FM SECTION>

IHF Sensitivity : (THD 3%)	Less than 15dB [at 87.5MHz] Less than 13dB [at 98.0 / 108.0MHz]
S/N 50dB Quieting sensitivity (L-R) :	Less than 36dB [at 87.5 / 98.0 / 108.0MHz]
Signal to noise ratio :	(MONO) More than 72dB (STEREO) More than 66dB [at 98.0MHz]
Distortion :	Less than 1.2% [at 98.0MHz]
Auto stop level :	20dB + 10/-5dB [at 98.0MHz (K,G)] 25dB + 10/-5dB (WITH RDS) [at 98.0MHz (EZ)]
Stereo separation :	More than 25dB [at 98.0MHz (G)] More than 22dB [at 98.0MHz (EZ,K)]
Intermediate frequency :	10.7MHz

<AM SECTION>

Sensitivity : (S/N 20 dB)	Less than 60dB [at 603kHz] Less than 58dB [at 999 / 1404kHz]
Signal to noise ratio :	More than 36dB [at 999kHz]
Distortion :	Less than 1.5% [at 999kHz]
Auto stop level :	Less than 60dB [at 999kHz]
Intermediate frequency :	450kHz

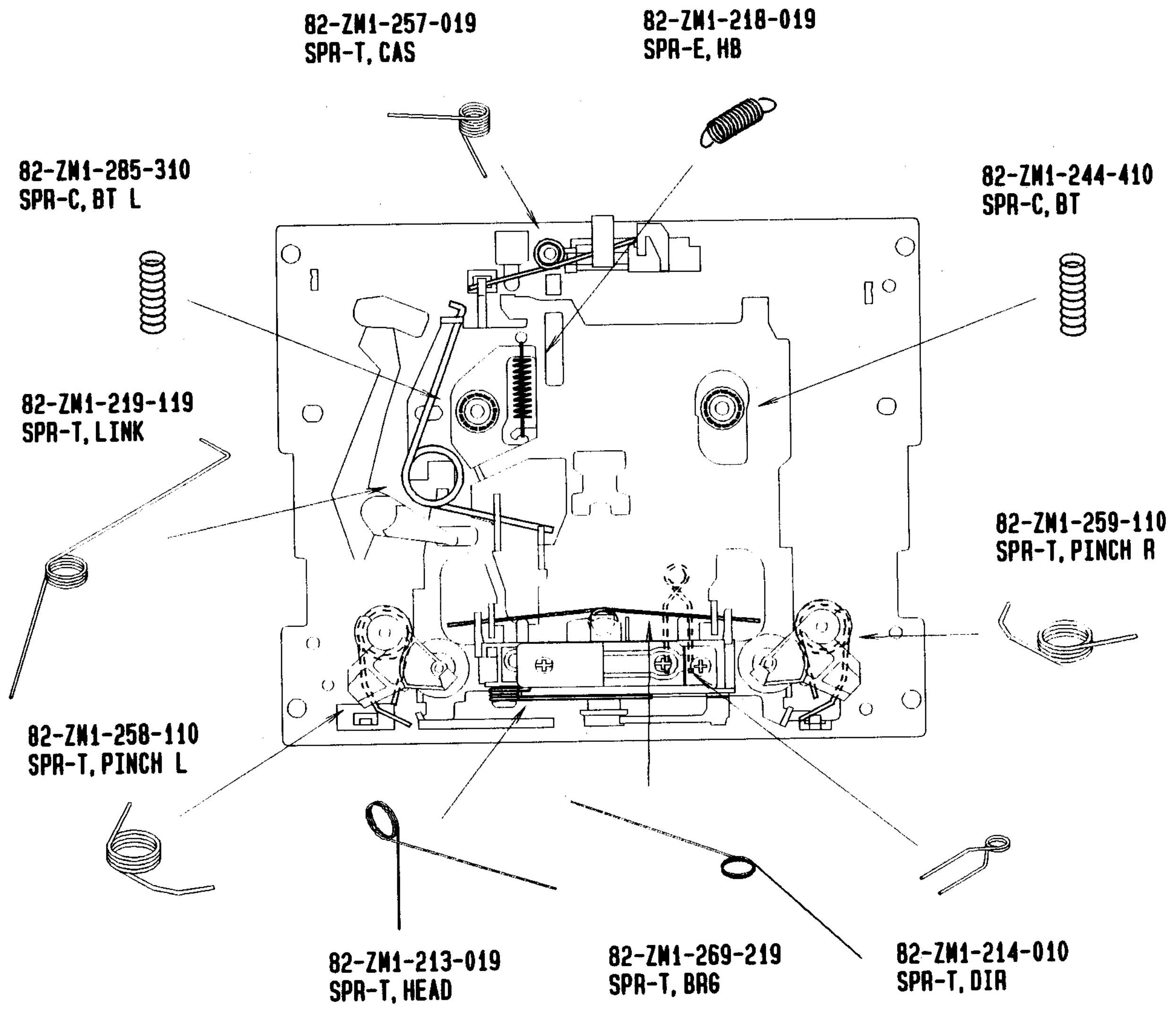
<LW SECTION>

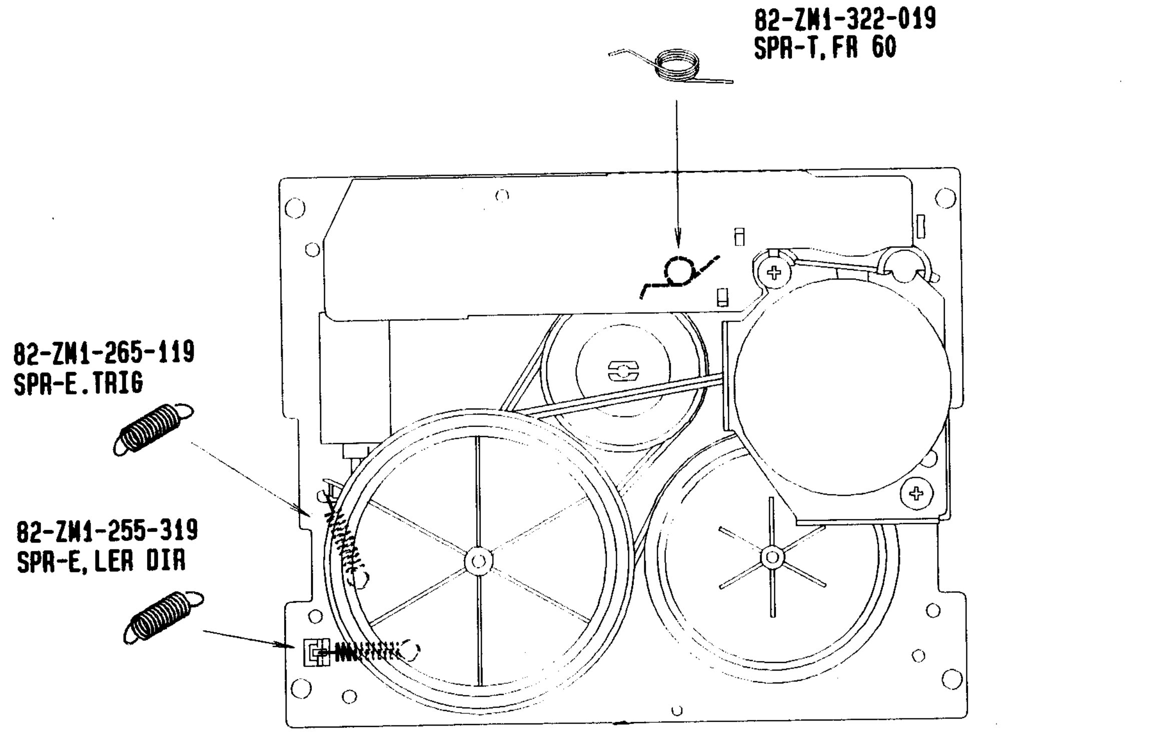
Sensitivity : (S/N 20 dB)	Less than 70dB [at 144kHz] Less than 66dB [at 198 / 290kHz]
Signal to noise ratio :	More than 34dB [at 198kHz]
Intermediate frequency :	450kHz

<DECK SECTION>

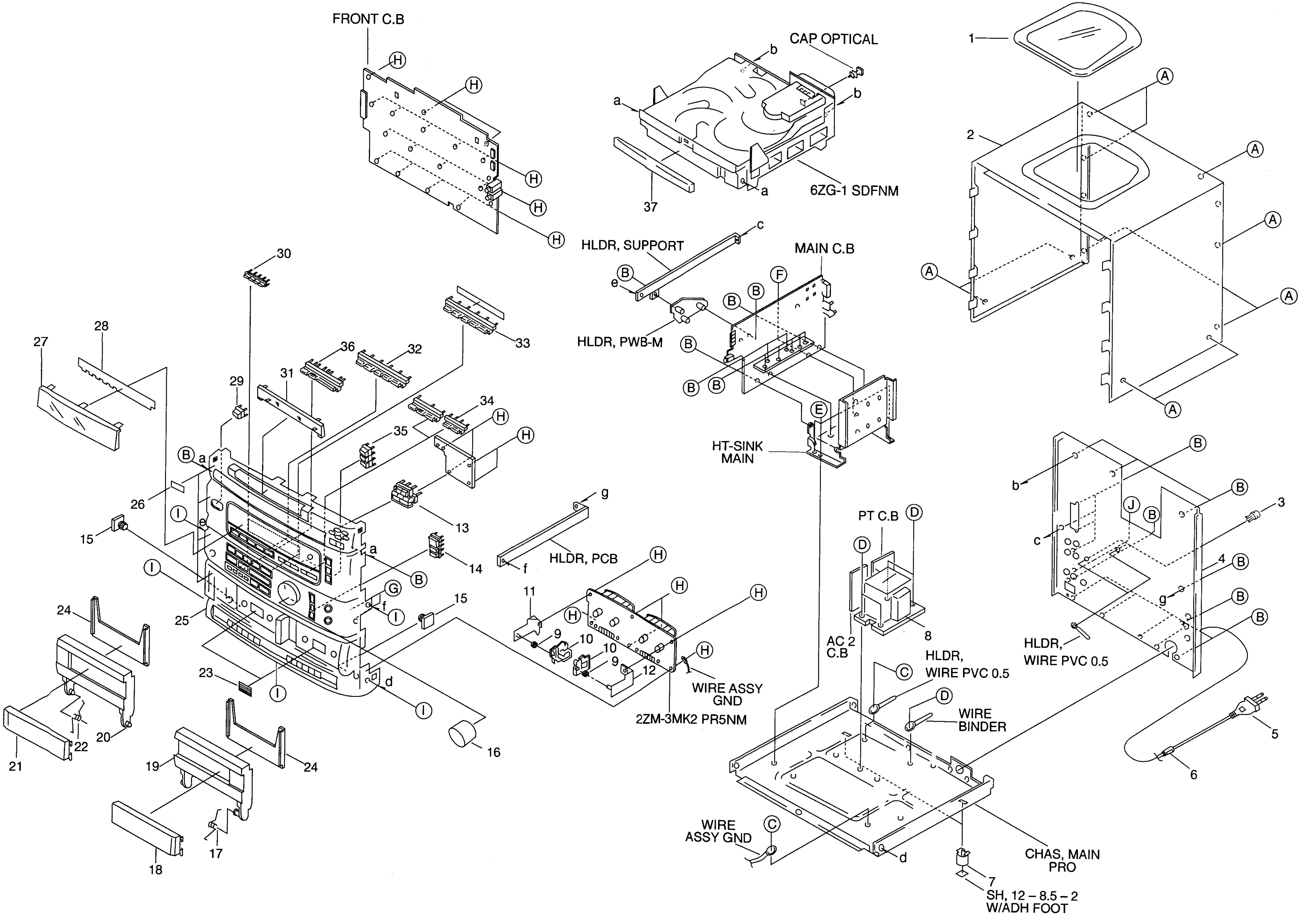
Tape speed :	3000Hz ± 45Hz
Wow & flutter :	Less than 0.15% (W.R.M.S)
Pinch roller pressure :	270 ~ 330g (FWD, REV)
Take-up torque :	30 ~ 55g-cm (FWD, REV)
F.F & REW torque :	75 ~ 180g-cm (FWD) 75 ~ 130g-cm (REW)
Back tension :	2 ~ 7g-cm (FWD, REV)
PB Output level :	2.8V ± 2dB (SP OUT 2V)
REC/PB Output level :	2.0V ± 2dB (SP OUT 2V)
Distortion (REC/PB) :	Less than 2.0% (NORMAL, CrO2)
Noise level (PB) :	Less than 18mV (NORMAL, SP OUT 2V) Less than 15mV (CrO2, SP OUT 2V)
Noise level (REC/PB) :	Less than 20mV (DOLBY OFF, NORMAL) Less than 18mV (DOLBY OFF, CrO2)
Crosstalk :	More than 50dB (1kHz, NORMAL)
Channel separation :	More than 35dB (1kHz, NORMAL)
Erasing ratio :	More than 60dB (at 125Hz, 10VU, CrO2)
REC bias frequency :	85kHz
Test tape :	NORMAL : TTA-602 CrO2 : TTA-615

SPRING APPLICATION POSITION


82-ZM1-257-019
SPR-T, CAS
82-ZM1-218-019
SPR-E, HB
82-ZM1-285-310
SPR-C, BT L
82-ZM1-244-410
SPR-C, BT
82-ZM1-219-119
SPR-T, LINK
82-ZM1-259-110
SPR-T, PINCH R
82-ZM1-258-110
SPR-T, PINCH L
82-ZM1-213-019
SPR-T, HEAD
82-ZM1-269-219
SPR-T, BRG
82-ZM1-214-010
SPR-T, DIR


82-ZM1-322-019
SPR-T, FR 60
82-ZM1-265-119
SPR-E.TRIG
82-ZM1-255-319
SPR-E, LER DIR

MECHANICAL EXPLODED VIEW 1 / 1



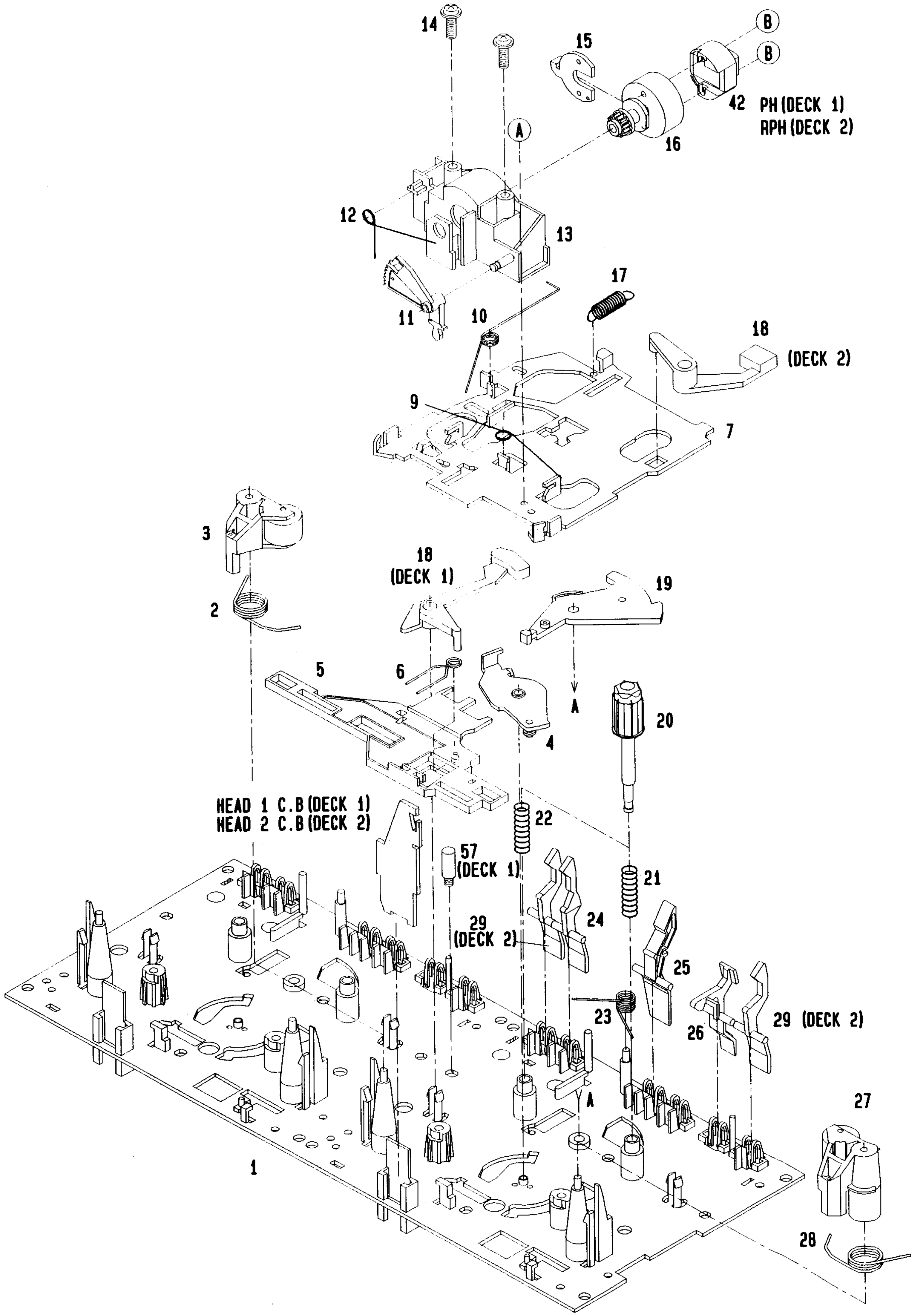
FRONT C.B
H
CAP OPTICAL
b
a
6ZG-1 SDFNM
37
1
2
A
HLDR, SUPPORT
c
e
B
F
MAIN C.B
HLDR, PWB-M
E
HT-SINK
MAIN
30
28
27
29
31
36
32
33
34
35
26
15
I
G
13
14
g
HLDR, PCB
f
11
9
10
12
WIRE ASSY
GND
2ZM-3MK2 PR5NM
24
25
23
16
20
22
21
19
17
18
PT C.B
D
AC 2
C.B
8
C
HLDR,
WIRE PVC 0.5
WIRE
BINDER
J
3
4
HLDR,
WIRE PVC 0.5
5
6
WIRE
ASSY GND
CHAS, MAIN
PRO
d
7
SH, 12 – 8.5 – 2
W/ADH FOOT

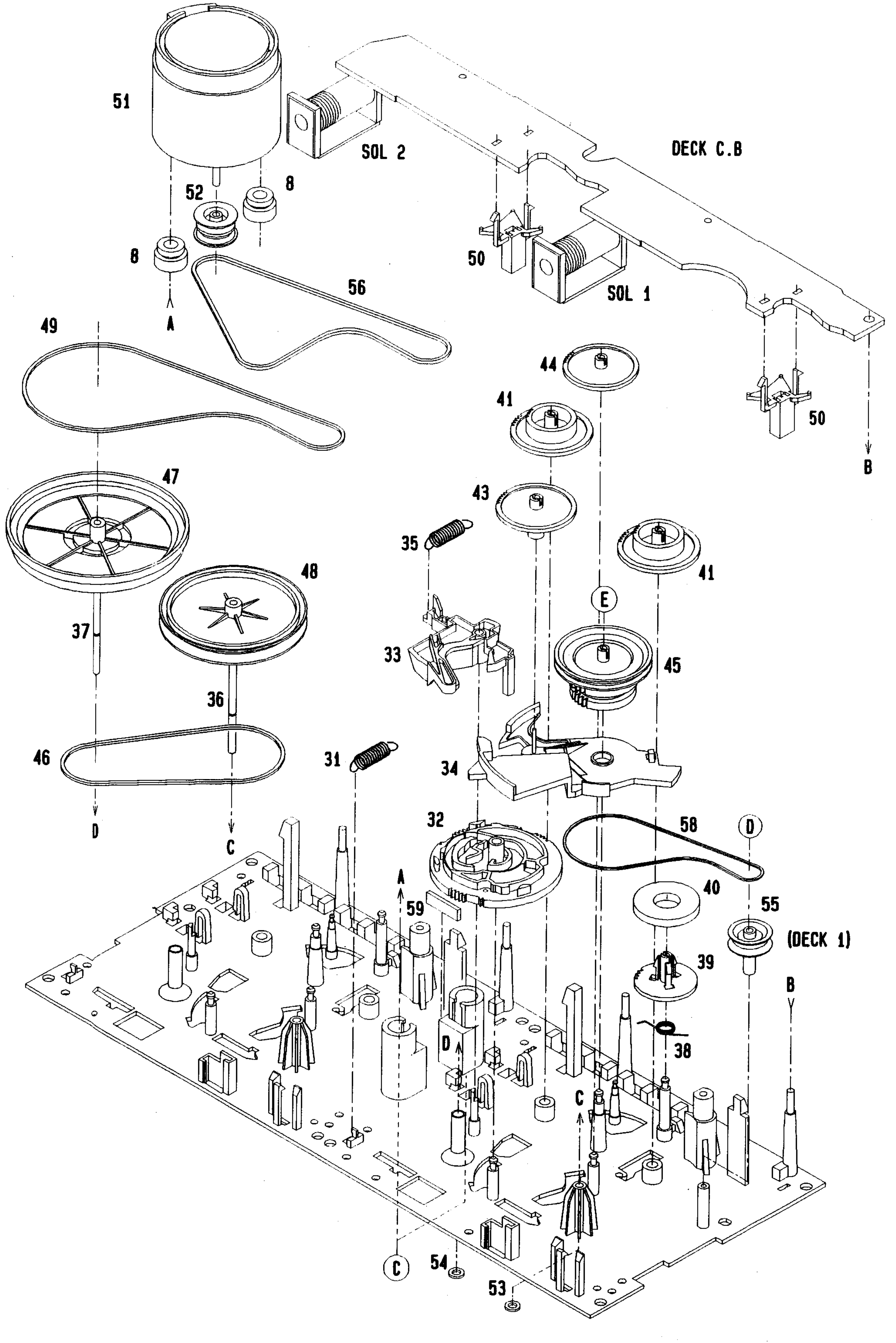
MECHANICAL PARTS LIST 1 / 1

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	86-MA3-042-010		WINDOW,TOP
2	87-MA5-027-010		CABI,STEEL
3	87-084-077-010		NYLON RIVET, 3.5-4.5
4	87-MAS-011-010		PANEL,REAR EZSTNM<EZ>
4	87-MAS-014-010		PANEL,REAR GSTNM<G>
4	87-MAS-010-010		PANEL,REAR KSTNM<K>
⚠ 5	87-050-081-110		AC CORD ASSY G<G>
⚠ 5	87-A80-007-110		AC CORD ASSY,K BLK 3P<K>
⚠ 5	87-050-079-010		AC-CORD ASSY,E BLK<EZ>
6	87-085-185-010		BUSHING, AC CORD (E)
7	87-MA3-062-010		FOOT, H17
⚠ 8	87-MAS-610-010		PT,7MA-S EZ
9	82-NF5-228-010		SPR-C,LOCK
10	82-NF5-229-010		PLATE,LOCK
11	87-NF4-216-010		HLDR,LOCK 1
12	87-NF4-217-010		HLDR,LOCK 2
13	87-MA5-011-010		KEY,DIRECT
14	87-MA5-033-010		KEY,BBE
15	87-063-165-010		OIL-DMPR 150
16	87-MA3-027-010		KNOB,RTRY MAIN
17	82-NF5-219-010		SPR-T,EJECT 2 (SIN)
18	87-MA5-026-010		WINDOW,CASS R
19	87-MA5-006-010		BOX,CASS R
20	87-MA5-005-010		BOX,CASS L
21	87-MA5-025-010		WINDOW,CASS L
22	82-NF5-218-010		SPR-T,EJECT 1 (SIN)
23	81-532-080-010		LABEL, CASS. COMPT
24	86-NF6-061-010		REFLECTOR,CASS
25	87-MAS-002-010		CABI,FR E<EZ>
25	87-MAS-003-010		CABI,FR K<K,G>
26	82-NE8-032-010		BADGE,AIWA 27.5
27	87-MAS-013-010		WINDOW,AMP (PRO-RDS)<EZ>
27	87-MAS-012-010		WINDOW,AMP(PRO)<K,G>
28	87-MAS-007-010		PLATE,GEQ(PRO)
29	87-MA5-012-010		KEY,POWER
30	87-MA5-035-010		KEY,DUB
31	87-MA5-023-010		WINDOW,CD
32	87-MA5-014-010		KEY,GEQ
33	87-MA5-015-010		KEY,FUN
34	87-MAS-005-010		KEY,PRO(RDS)<EZ>
34	87-MAS-008-010		KEY,PRO(VF)<K,G>
35	87-MA5-013-010		KEY,DSP
36	87-MA5-037-010		KEY,ASSY PLAY
37	87-MA5-009-010		PANEL,TRAY
A	87-067-641-010		UTT2+3-8 W/O SLOT BLK
B	87-067-703-010		BVT2+3-10 W/O SLOT
C	87-067-688-010		BVTT+3-6
D	87-067-975-010		S-SCREW,IT+4-8
E	87-067-579-010		BVT2+3-8 W/O SLOT
F	87-NF4-224-010		S-SCREW,IT3B+3-8 CU
G	81-MK1-210-010		S-SCREW,BFT2+3-16
H	87-078-060-010		BVIT3B+3-10
I	87-591-095-410		QIT+3-8
J	87-067-584-010		BVT+3-6 W/O SLOT

TAPE MACHANISM EXPLODED VIEW 1 / 1





TAPE MECHANISM PARTS LIST 1 / 1

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

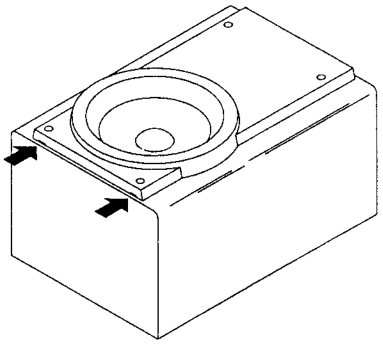
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	82-ZM3-301-519		CHAS ASSY,M2
2	82-ZM1-258-110		SPR-T,PINCH L
3	82-ZM1-341-110		LVR ASSY,PINCH L2
4	82-ZM1-333-010		PLATE,LINK 2
5	82-ZM1-266-11K		LVR,DIR
6	82-ZM1-214-010		SPR-T,DIR
7	82-ZM1-206-81K		CHAS,HEAD
8	82-ZM3-307-019		CUSH-G,DIA3.7-8-3.2
9	82-ZM1-269-219		SPR-T,BRG
10	82-ZM1-219-119		SPR-T,LINK
11	82-ZM1-210-119		GEAR,H T
12	82-ZM1-213-019		SPR-T,HEAD
13	82-ZM1-207-619		GUIDE,TAPE
14	86-ZM4-206-010		S-SCREW,AZIMUTH
15	82-ZM1-314-119		PLATE,HEAD
16	82-ZM1-208-119		HLDR,HEAD
17	82-ZM1-218-019		SPR-E,HB
18	82-ZM1-263-110		LVR,EJECT L (DECK 1)
18	82-ZM1-264-010		LVR,EJECT R (DECK 2)
19	82-ZM1-222-21K		LVR,PLAY
20	82-ZM1-217-319		REEL TABLE
21	82-ZM1-244-510		SPR-C,BT
22	82-ZM1-285-310		SPR-C,BT L
23	82-ZM1-257-019		SPR-T,CAS
24	82-ZM1-241-319		LVR,MC
25	82-ZM1-242-019		LVR,CAS
26	82-ZM1-243-019		LVR,STOP
27	82-ZM1-344-110		LVR ASSY,PINCH R2
28	82-ZM1-259-110		SPR-T,PINCH R
29	82-ZM1-240-11K		LVR,REC (DECK 2)
31	82-ZM1-255-319		SPR-E,LVR DIR
32	82-ZM3-305-01K		GEAR,CAM M2
33	82-ZM1-227-21K		LVR,TRIG
34	82-ZM3-306-11K		LVR,FR M2
35	82-ZM1-265-119		SPR-E,TRIG
36	82-ZM1-236-019		CAPSTAN N 2-41.5
37	82-ZM1-239-019		CAPSTAN N 2.2-41.7
38	82-ZM1-322-019		SPR-T,FR60
39	82-ZM1-220-219		GEAR,IDLER
40	82-ZM3-616-019		RING MAGNET 4
41	82-ZM1-216-31K		GEAR,REEL
42	87-A90-319-010		HEAD,PH HADKH2 FPC
42	87-A90-320-010		HEAD,RPH HADKH5 FPC
43	82-ZM1-225-21K		GEAR,FR
44	82-ZM1-226-019		GEAR,REW
45	82-ZM3-333-310		SLIP DISK ASSY 2
46	82-ZM1-338-010		BELT FR4
47	82-ZM1-349-110		FLY-WHL,R W(DECK 2)
47	82-ZM3-338-110		FLY-WHL,R3 W(DECK 1)
48	82-ZM1-348-010		FLY-WHL,L W(DECK 2)
48	82-ZM1-348-010		FLY-WHL,L W(DECK 1)
49	82-ZM3-329-210		BELT,SBU R2
50	82-ZM1-245-210		HLDR,IC
51	87-045-347-019		MOT,SHU2L 70(M1)
52	82-ZM3-221-010		PULLEY,MOT 2M
53	82-ZM1-288-019		SH,1.63-3.2-0.5 SLT
54	80-ZM6-243-019		SH,1.75-3.6-0.5 SLT
55	82-ZM3-335-210		PULLEY,COUPLER M3(DECK 1)
56	82-ZM3-337-010		BELT,SBU MOT 2
57	82-ZM3-339-010		SHAFT,COUPLER N3(DECK 1)
58	86-ZM1-206-010		BELT,MAIN L
59	82-ZM3-340-010		SH,BELT D2
A	85-ZM3-202-010		S-SCREW,TG
B	80-ZM6-207-019		V+1.6-7
C	82-ZM3-318-019		S-SCRW MOTOR M2
D	87-B10-043-010		W-P,0.99-4-0.25 SLT
E	82-ZM3-334-010		PW,2.16-6-0.4

SPEAKER DISASSEMBLY INSTRUCTIONS

Type.1

矢印の位置にマイナスドライバーを差し込んで、パネルを外します。各々のスピーカーユニットのビスを取り、スピーカーユニットを外してください。

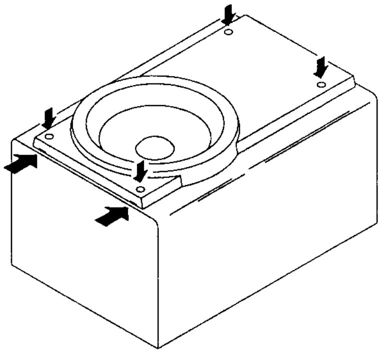
Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.



Type.2

グリルフレームを外し、4個のゴムキャプブをマイナスドライバーで端の方から持ち上げて外すと中にビスが有りますので、ビスを取り外します。矢印の位置にマイナスドライバーを差し込んで、パネルを外します。各々のスピーカーユニットのビスを取り、スピーカーユニットを外してください。

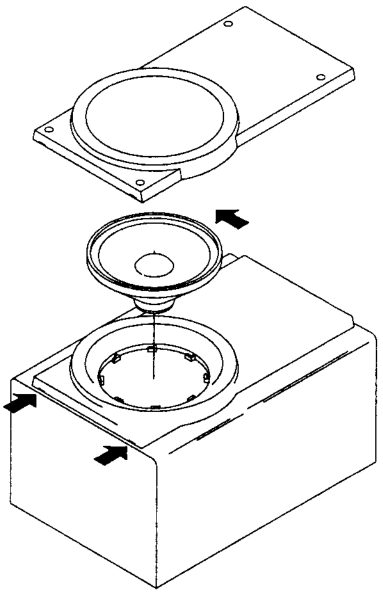
Remove the grill frame and four pieces of rubber caps by pulling out with a flat-bladed screwdriver Remove the screws from hole where installed rubber caps. Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.



Type.3

矢印の位置にマイナスドライバーを差し込んで、パネルを外します。各々のスピーカーユニットの凹にマイナスドライバーを差し込んで、反時計方向に回転させスピーカーユニットを外してください。スピーカーユニット交換後は時計方向にクリック音がするまで、回転させて取り付けます。

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counter-clockwise direction while inserting a flat-bladed screwdriver into one of the hollows arround speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turning to clockwise direction until "click" sound comes out.



SPEAKER PARTS LIST 1 / 1
SX–ZR750 (YBNY,YBNY1,YBNL)

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-MSP-001-010		PANEL,FR R<YBNL>
2	87-MSP-002-010		PANEL,FR L<YBNL>
3	87-MSP-003-010		PANEL,BA<YBNL>
4	87-MSP-011-010		GRILLE,FRAME ASSY<YBNL>
5	87-MSP-008-010		HLDR,TW<YBNL>
6	87-MSS-001-010		PANEL,TW R<YBNL>
7	87-MSS-002-010		PANEL,TW L<YBNL>
8	86-VSR-602-010		SPKR,W 200<YBNL>
9	84-VS3-603-010		SPKR,T 60<YBNL>
10	87-MSP-606-010		SPKR,CORD<YBNL>
11	87-VSR-006-010		GRILLE,FRAME ASSY E<YBNY,YBNY1>
12	86-VSR-603-010		SPKR,TW 60<YBNY,YBNY1>
13	86-VSR-605-010		SPKR,CERAMIC<YBNY,YBNY1>
14	87-MSS-605-010		SPKR,W 160<YBNY,YBNY1>

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, CERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTROL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOAD MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL

サービス技術ニュース	
番号	連絡内容
G—　—	
G—　—	
G—　—	

アイワ株式会社
AIWA CO.,LTD.

9630466, 750038

Tokyo Japan

〒110　東京都台東区池之端1−2−11　☎03（3827）3111　（代表）

Printed in Singapore